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THIRTY-SIXTH
ANNUAL REPORT

OF THE

DEPARTMENT
OF HEALTH

For the Year Ending December 31, 1920



WITH THE COMPLIMENTS OF THE

DEPARTMENT OF HEALTH
OF NEWARK, N. J.

THIS DEPARTMENT WOULD BE GLAD TO RECEIVE YOUR
PUBLICATIONS IN RETURN

CHARLES V. CRASTER, M. D., D. P. H.
HEALTH OFFICER



DEPARTMENT OF HEALTH LABORATORY—MAIN ROOM

ANNUAL REPORT

OF THE

Department of Health

[DEPARTMENT OF PUBLIC AFFAIRS]

CITY OF NEWARK, NEW JERSEY



FOR THE YEAR ENDING DECEMBER 31, 1920

THE ESSEX PRESS, PRINTERS
NEWARK, N. J.



"That prison doors should be barred on the outside no less heavily and carefully than they are barred within, that the universal diffusion of common means of decency and health is as much the right of the poor as it is indispensable to the safety of the rich and of the State."
Charles Dickens.

TO THE READER:

The Annual Report of the Department of Health presents the work done for the community in the preservation of health in 1920. It will show that a wider vision of service is required to meet the increasing needs of a growing city population.

CHARLES V. CRASTER, M. D., D. P. H.,

Health Officer.

March 1, 1921.

DEPARTMENT OF HEALTH

[DEPARTMENT OF PUBLIC AFFAIRS]

CITY OF NEWARK

Director.....CHARLES P. GILLEN, Mayor

Health Officer.....CHARLES V. CRASTER, M. D., D. P. H.

OFFICES

Headquarters, Plane and William Streets.....Phone 8550 Mkt.

City Dispensary, Plane and William Streets.....Phone 8550 Mkt.

Laboratories (Bacteriological, Pathological and Serological)

Hospital Building, 116 Fairmount Avenue.....Phone 9300 Mkt.

Chemist, H. B. BALDWIN, 927 Broad Street.....Phone 1100 Mkt.

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EMPLOYEES OF THE DEPARTMENT OF HEALTH

EXECUTIVE DIVISION

CHARLES V. CRASTER, M. D.	<i>Health Officer</i>
WILLIAM J. BUEHLER	<i>Bookkeeper</i>
ROBERT F. MORGAN, JR.	<i>Stenographer Clerk</i>
HENRY A. HABIG	<i>Stenographer</i>
MARCELLA DeLACEY	<i>Telephone Operator</i>
MALCOLM HUNTER	<i>Multigraph Operator</i>
ELBERT S. BALL	<i>Clerk Vital Statistics</i>
CORA B. NATHAN	<i>Assistant Clerk Vital Statistics</i>
AUGUST W. JARGOSCH	<i>Janitor</i>
JAMES P. MADDEN	<i>Night Custodian</i>
JOSEPH COLLINS	<i>Chauffeur</i>
FRANCIS J. FLYNN	<i>Chauffeur</i>
DAVID D. CHANDLER (Retired).	<i>Health Officer</i>

SANITARY DIVISION

WILLIAM H. YOUNG	<i>Clerk in Charge</i>
ANDREW J. BRADY	<i>Detailed Inspector</i>
BERNARD J. CAHILL	<i>Detailed Inspector</i>
CHARLES F. CONRAD	<i>Detailed Inspector</i>

Inspectors

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MORRIS SEIDL	JAMES WHELAN
CHARLES H. BURKE	EDWARD J. FLYNN
ANTONIO PANZERA	CHARLES E. DEVINE
HUBERT O'ROURKE	HOWARD HUFFERT
JOSEPH A. MAGUIRE	ADOLPH O. ELSASSER
CLARENCE J. PALMER	THOMAS P. WALSH
PATRICK J. KEATING	GUSTAVUS E. FRIEDEMANN
JAMES J. WATERS	DANIEL MURPHY
HENRY MACDONALD	JAMES J. MCCARRON
CASPAR BENZ	EDMOND A. RYAN
PATRICK J. BROGAN	EDWARD GAYNOR

CHARLES N. McLAUGHLIN

JOHN P. ROGERS	<i>Stenographer</i>
EDWARD A. SMITH	<i>Stenographer</i>

DEPARTMENT OF PUBLIC AFFAIRS

PLUMBING DIVISION

CHARLES A. HALLGRING *Chief Inspector**Inspectors*

ANDREW J. MCGOOKIN

JACOB KULL

EDWARD P. COULSTON

JOHN L. WHELAN

CONTAGIOUS DISEASE DIVISION

DR. E. E. WORL *Superintendent*JOHN J. GREENE *Clerk*

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THOMAS MULLIGAN..... *Chief Inspector*JENNIE McNALLY..... *Telephone Clerk*GRACE O'CONNOR..... *Clerk-Typist*JOSEPH GARDAM..... *Health Physician**Inspectors*

HIRAM R STEWART

GEORGE A VAN HOUTEN

RICHARD J. CORBLEY

FRED W. NICHOLS

GEORGE W. GILMORE

THOMAS F. NEWTON

OBADIAH S COLE

LEO G DUFFY

IRWIN C. DAKIN

JOHN A. DONOVAN

GARRETT E. ST JOHN

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LABORATORY

DR R N CONNOLLY	<i>Bacteriologist in Charge</i>
THOMAS RIPLEY	<i>Assistant Bacteriologist</i>
H. A. TARBELL	<i>Assistant Bacteriologist</i>
G WARD DISBROW	<i>Assistant Bacteriologist</i>
H S MARTLAND	<i>Pathologist</i>
JOHN F DUNN	<i>Culture Collector</i>
WILLIAM J FOYLE	<i>Culture Collector</i>
WILBUR FLOCK	<i>Laboratory Assistant</i>
THOMAS CROGHAN	<i>Typewriter-Copyist</i>
MARY FUREY	<i>Portress</i>

CITY DISPENSARY

HENRY OLTMAN	<i>Apothecary</i>
ARTHUR F. WARREN.	<i>Assistant Apothecary</i>
MALVINA H. RYAN	<i>Record Nurse</i>
GENEVIEVE K. HEROLD	<i>Nurse</i>
ALICE I. DORAN.	<i>Nurse</i>
EDNA B. W. SMITH	<i>Nurse</i>
ANNA K. JACOB	<i>Nurse</i>
JEAN WAUGH.	<i>Nurse</i>
JAMES CENTANNI	<i>Attendant</i>
JACOB F SCHAEFFER	<i>Attendant</i>
GRACE E. WEHR	<i>Office Assistant</i>
LEO J. McMANUS.	<i>Dentist</i>
J. E. H. GUTHRIE	<i>Dentist</i>
PHILIP BAYER.	<i>Masseur</i>
CLARA M MACLELLAND	<i>Masseuse</i>
ROSE MOORE	<i>Scrubwoman</i>
MARY B. GRANT	<i>Scrubwoman</i>
VAN S HURLBURT	<i>Janitor</i>

VENEREAL DISEASE BUREAU

H. J F. WALLHAUSER, M. D.	<i>Director</i>
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DISTRICT PHYSICIANS

DR. MEYER JEDEL	DR. M J COFFEY
DR. WATSON F. L. RODEMANN	DR. THOMAS J. KELLY
DR. ABRAHAM ROTHSEID	DR. WILLIAM T RUMAGE

PAROCHIAL SCHOOL NURSES

ANNA FULTON	JULIA M. MEEHAN
FLORENCE M MAWER	MARY E CLINTON
SUZANNA A. SADLER	ANNA LIEBLER

TUBERCULOSIS DIVISION

M J FINE, M D	<i>Director</i>
WILLIAM H GREEN, M. D	<i>Health Physician</i>
IRVING WILLNER, M. D	<i>Health Physician</i>
MARY F MCGUINNESS	<i>Stenographer and Clerk</i>

Health Nurses

CORNELIA WHITEHEAD	HAZEL PADDOCK
EVA M. MULFORD	MARGARET A. McLOUGHLIN
MARY A. ROSS	ELLA TILTON
CATHERINE YELLEN	MARTHA I. HUNT

CHILD HYGIENE DIVISION

JULIUS LEVY, M. D.	<i>Director</i>
--------------------	-----------------

Health Physicians

HYMAN SHIAPPIN	CHARLES M ROBBINS
PAUL H HOSP	ARTHUR J ELLIS
CLARENCE S JANIFER	

Health Nurses

EVA WAX	ETHEL H WRIGHT
FLORENCE E FREEMAN	EMILY McCORMICK
ETHEL BOYCE	MABEL M PHILPOT
LAURELLA A STREIT	EDITH EVANS
CELIA R BALSON	MATILDA M CREGAR
HELEN C. O'MALLEY	IDA E LONG

PEARL OSTROW	<i>Clerk-Typist</i>
LILLIAN SOBO	<i>Clerk Typist</i>
ROSE CONDURSE	<i>Portress</i>

MENTAL HYGIENE

IR C C LOON	<i>Director</i>
IR AMOS E HOWE	<i>Assistant Director</i>
IR WILLIAM I REMAGE	<i>Clinic Physician</i>
DR J L S SOBIN	<i>Clinic Physician</i>
DR FRANCIS M SHOCKLEY	<i>Clinic Physician</i>
BEATRICE GOSLING	<i>Social Worker</i>
AGNES MCGUINNESS	<i>Clerk</i>

ANNUAL REPORT

OF THE

Health Officer

ANNUAL REPORT

OF THE

Health Officer

To His Honor, Charles P. Gillen, Mayor, Director of Public Affairs.

DEAR SIR: I have the honor to submit to you herewith the report of the Department of Health for 1920

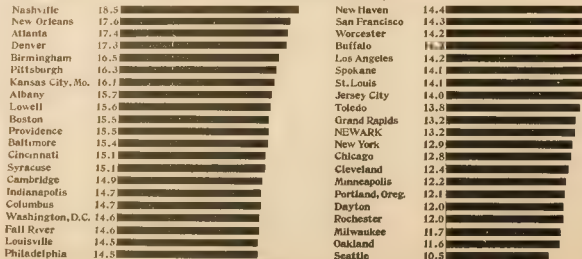
Following a year of unusual freedom from epidemics of disease, it was not expected that the record for 1919 would be continued into 1920. Despite, however, unfavorable conditions, of which the most important were a long and severe winter, housing and coal shortage, the year 1920 will go on record as one of low mortality, comparing favorably with any previous year in the history of the city.

The return of influenza, the ground swell, so to speak, of the influenza pandemic of 1918-1919, became manifest at the recurrence of the disease in the early months of 1920, when 9,251 cases were reported during January, February and March. The type of the disease had, however, so considerably changed from the previous visitation, mainly as shown in the lessened virulence and mortality, that the physicians of the city doubted that the disease was true epidemic influenza. On the other hand, there was unmistakable evidence shown in the fatality recorded for the epidemic, not only in deaths recorded as due to influenza alone but also in the great increase in deaths due to pneumonia that we had to deal with, and a proportionate amount of sickness of true influenza type. It is a question, however, whether all the cases reported were true influenza. Were we able to sift out all the colds and

Annual Death Rates For 1920 In Cities Over 100,000 Population

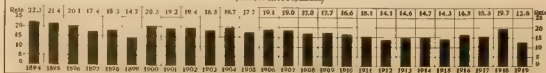
(Tabulation By The U.S. Bureau Of The Census, Based Upon Estimated Population July 1st, 1920.)

(Rate per 1,000 Population)



NEWARK'S DEATH RATE 1894-1919

(Rate per 1,000 Population)



catarrhs from the real cases a mortality as high as that seen in the former epidemics would be in all probability found to have been present all the time.

The return influenza wave was coincident with an unusual prevalence of measles, which, although always more or less with us, comes along in epidemic waves every two years. Rarely does it exceed this period in cities. The dangerous side in all measles outbreaks is the attitude of the public in thinking that this is a minor disease, whereas a study of the deaths from broncho pneumonia during any measles outbreak will show the high mortality from this fatal complication of the disease.

THE CITY POPULATION

The 1920 United States census has shown officially that Newark has a population of 414,216. The actual population revealed differs very widely from the estimated population of 440,000 upon which our recent calculations have been based. Although this figure has been somewhat of a disappointment to civic pride, there can be no doubt that most estimates of the city's growth have been unduly optimistic. Criticisms of census taking methods are naturally foremost but it is questionable whether the population boosters were justified in their calculations. Estimates of a population around the half million were common before the census, irrespective of the facts known to all cities in regard to the cessation of war industries and the difficulty of obtaining licenses within the city limits. If a record were available of persons living there, whether in the city and living outside its boundaries, it would be found that the floating population of tax-comuters would be large enough to make the present figure a help to realize the popular expectations before the census.

The natural growth of Newark will not only include the building of new residential areas but also the new extension, the municipal consolidation and the gradually a part of our city to form a Greater Newark.

The effect of the new population being lower than the estimate will react upon our mortality figures, making for a slightly increased rate all around.

NEWARK CENSUS, 1920—WARD FIGURES

Ward	Population
First	30,008
Second	17,014
Third	35,343
Fourth	12,449
Fifth	20,863
Sixth	20,323
Seventh	17,101
Eighth	31,069
Ninth	34,539
Tenth	22,753
Eleventh	20,806
Twelfth	25,433
Thirteenth	38,384
Fourteenth	36,104
Fifteenth	16,010
Sixteenth	35,917
Total	414,216

THE MORTALITY RATE

13.4 per 1,000

The deaths from all causes in the city during 1920 numbered 551, an excess of 17 over the previous year, making death rate of 13.4 per thousand upon the census population 414,216, as compared with 12.6 per thousand for 1919.

Although the total number of deaths for 1920 exceeds that of the previous year, the increased rate for 1920 is more apparent than real, in the ratio being the result of the lowered population for this year. This is well seen when the estimated population for 1919 is used in calculating the rate with the death record for 1920 making a rate of 12.6 per thousand, which is not so far from the phenomenally low death rate for 1919.

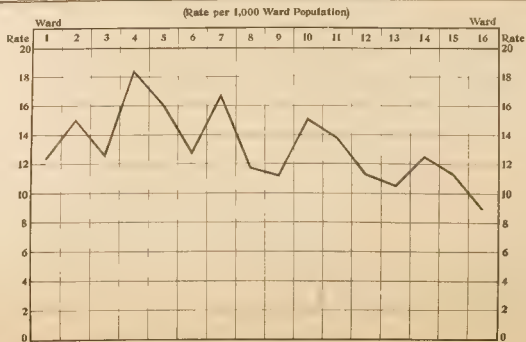
The total crude death rates for the city from 1894 to 1920 were as follows:

CRUDE DEATH RATES FOR NEWARK ACCORDING TO
CENSUS AND INTERCENSAL ESTIMATED INCREASES
(Rate per 1,000 Population)

Year	Population	No. of Deaths	Death Rate
1894	203,923	4,543	22.28
1895	215,725	4,615	21.37
1896	225,000	4,716	20.96
1897	230,000	4,010	17.43
1898	235,000	4,303	18.30
1899	240,000	3,537	18.90
1900	246,000	5,006	20.34
1901	250,000	4,806	19.22
1902	255,000	4,943	19.38
1903	260,000	4,923	18.50
1904	270,000	5,378	19.77
1905	283,239	5,025	17.74
1906	290,000	5,551	19.14
1907	300,000	5,724	19.08
1908	305,000	5,207	17.07
1909	311,000	5,529	17.77
1910	347,469	5,784	16.64
1911	352,000	5,337	15.16
1912	370,000	5,423	14.65
1913	380,000	5,562	14.63
1914	395,000	5,809	14.70
1915	375,000	5,382	14.30
1916	385,000	6,357	16.50
1917	405,000	6,205	15.30
1918	430,000	8,483	19.72
1919	440,000	5,534	12.57
1920	414,216	5,551	13.40

The following table gives the general death rate, together with morbidity and mortality from nine communicable diseases, in forty three cities of the United States over 100,000 in population

Mortality From All Causes Of Death By Wards In Newark, N. J. For The Year 1920



MORTALITY FROM ALL CAUSES OF DEATHS BY WARDS
(Rate per 1,000 Census Ward Population)

	Population	Deaths	Rate
Ward 1	36,608	370	12.33
Ward 2	17,014	256	15.05
Ward 3	35,343	439	12.42
Ward 4	12,449	228	18.31
Ward 5	20,803	334	16.01
Ward 6	26,523	256	12.60
Ward 7	17,101	287	16.78
Ward 8	31,000	366	11.78
Ward 9	34,836	383	11.09
Ward 10	22,753	343	15.07
Ward 11	20,806	290	13.94
Ward 12	25,433	288	11.32
Ward 13	38,384	408	10.63
Ward 14	36,104	452	12.52
Ward 15	16,010	183	11.43
Ward 16	35,917	324	9.02

DEATHS UNDER SPECIAL HEADINGS—INFECTIOUS DISEASES

In the following table of mortality the deaths under special causes are shown for five years. In the increased mortality recorded for 1920 it will be seen to be confined to the epidemic respiratory diseases.

Deaths from—	1920	1919	1918	1917	1916
Infantile Paralysis	7	2	6	11	376
Typhoid Fever	8	9	15	17	23
Measles	50	7	120	5	102
Scarlet Fever	12	12	11	3	7
Whooping Cough	56	4	54	60	25
Diphtheria	62	50	82	50	57
Influenza	222	267	1387	24	45
Epidemic Meningitis	16	22	45	43	22
Pneumonia, Lobar ..	454	432	1029	553	467
Pneumonia, Broncho ..	302	213	469	211	264
Diarrhoeal Disease Deaths under 5 years ..	244	295	331	315	264
Tuberculosis (Pulmonary) ..	470	552	683	704	685
Accident	278	304	389	296	303
Homicide ..	14	26	20	25	14
Suicide ..	47	56	50	64	55

MORTALITY FROM INFLUENZA

The deaths from influenza during the year numbered 222 as compared with 267 for the previous year. The return wave of the influenza epidemic of 1918 became manifest in January, 1920, and was continued into March, resembling in this way the early part of 1919. Among the influenza deaths 105 were males and 117 females. The greatest mortality from this cause was again shown to occur in the twenty-year period 25 to 44 years, in which there were 89 deaths.

The age period 45 to 64 ranked second with 45 deaths.

Under five years of age there were 29 deaths from this cause.

Accompanying the influenza prevalence was a high mortality from pneumonia of both types. In 1920 these deaths numbered 756. The two great peaks of incidence of mortality were, under five years of age, 285, and the age period 25 to 44 years, 184 deaths. The colored deaths from this disease rank high numbering 88 in a colored population of 17,010.

DEATHS FROM MEASLES

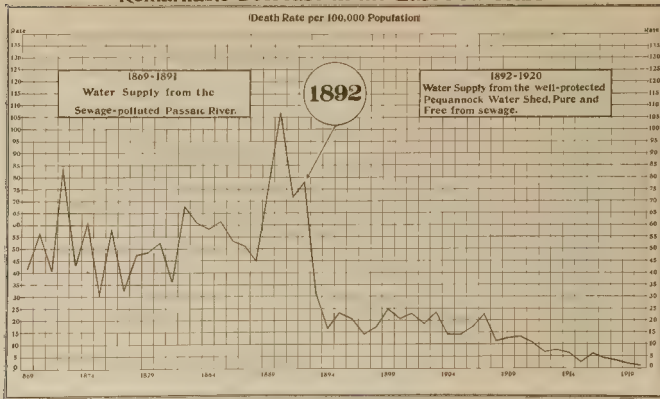
There were 50 deaths recorded during the year due to measles. The singular fatality of measles among the very young cannot be better exemplified than in this instance, where the whole 50 deaths were under five years of age. Not only is the fatality high for measles, but also for all other respiratory infections at this age period.

THE TYPHOID FEVER RATE

The City of Newark is exceptionally endowed with a sanitary water supply. The results are seen in the low typhoid fever rate, which establishes a record for Newark, the rate for 1920 being 1.6 per 100,000 population. This places Newark in the honor roll, tying for tenth place with Seattle for all the cities of the United States.

Newark's Water Supply Greatly Reduces Typhoid Fever Mortality

Remarkable Decrease in the Last Few Years



Vital Statistic Division, Dept. of Health, Newark, N. J.

The following table from the *Journal of the American Medical Association*, March 20, 1921, places Newark with Seattle at the head of cities in the country with populations from 300,000 to 500,000.

DEATHS FROM TYPHOID PER 100,000 POPULATION

	1920	1919	Average 1916-1920	Average 1911-1915	Average 1906-1910
Newark, N. J.	1.9	2.1	3.3	6.8	14.6
Seattle	1.9	2.3	2.9	5.7	25.2
Milwaukee	2.2	3.5	6.5	13.6	27.0
Minneapolis	2.6	3.1	5.0	10.6	32.1
Cincinnati	3.0	2.6	3.4	7.8	30.1
Indianapolis	3.8	4.7	10.3	20.5	30.4
Washington	6.5	3.7	9.5	17.2	36.7
New Orleans	7.4	13.7	17.5	20.9	35.6
Kansas City, Mo.	7.6	11.2	10.6	16.2	35.6

A RECORD LOW MORTALITY FOR TUBERCULOSIS

The good effects following a year of low disease prevalence were somewhat counteracted by the onset of influenza and measles in the spring months of 1920 both of which diseases happened to affect adversely the mortality from tuberculosis.

In spite of these handicaps, however, the deaths from this disease numbered 540, being 97 less than in 1919. This establishes a rate of 130.4 per 100,000 population, being a record for the City of Newark.

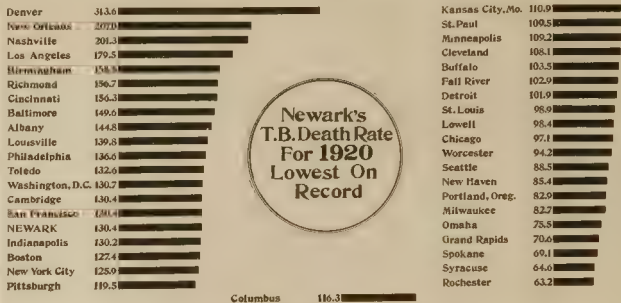
The persistent effort made by this department for an adequate number of sanatorium beds is at last being realized and a further reduction in our tuberculosis mortality may be anticipated. It is significant that the mortality from this disease among the colored population is 470.3 per 100,000, nearly four times that of the whites. This has a considerable bearing upon the general rate for the disease.

Out of forty-one American cities Newark ranks as the sixteenth highest for 1920. In 1919 the rank was twelfth highest amongst the same cities.

Mortality from Tuberculosis (all forms) in Forty-one Cities, 1920

(Tabulation Based Upon U.S. Bureau Of The Census Estimated Population July 1st, 1920)

(Rate per 100,000 Population)



MORTALITY FROM TUBERCULOSIS (ALL FORMS), IN
FORTY-ONE AMERICAN CITIES

(Rate per 100,000 Population)

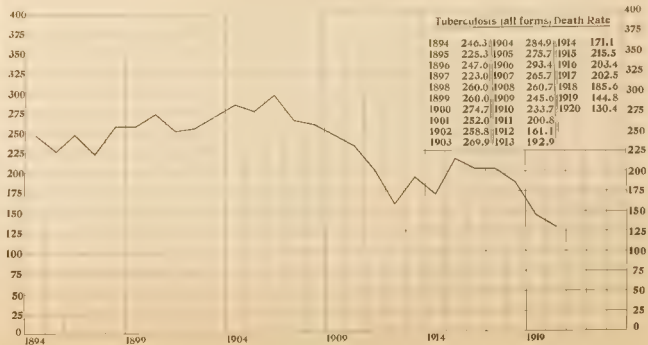
The following death rates are based upon the United States Bureau of the Census estimated population July 1, 1920:

Cities—	Population	Deaths	Rate
Denver .	258,583	811	313.6
New Orleans	389,897	807	207.0
Nashville	118,740	239	201.3
Los Angeles	587,073	1,054	179.5
Birmingham	180,685	287	158.8
Richmond	171,667	269	156.7
Cincinnati	401,878	628	156.3
Baltimore .	740,172	1,107	149.6
Albany .	113,290	164	144.8
Louisville	235,289	326	139.8
Philadelphia	1,837,270	2,509	136.6
Toledo	246,617	327	132.6
Washington, D. C.	437,571	572	130.7
NEWARK	417,654	540	130.4
Cambridge	109,694	143	130.4
San Francisco .	513,122	669	130.4
Indianapolis	317,868	414	130.2
Boston	751,108	957	127.4
New York City	5,665,148	7,135	125.9
Pittsburgh	590,876	739	125.8
Cincinnati	239,807	279	116.3
Kansas City, Mo.	328,326	364	111.5
St. Paul	235,617	258	109.5
Minneapolis	384,571	416	108.2
Cleveland	808,268	874	108.1
Buffalo	510,106	528	103.5
Fall River	120,546	124	102.6
Detroit	993,739	1,013	101.0
St. Louis	777,320	769	89.0
Lowell	112,798	111	68.4
Chicago	2,727,504	2,440	67.1
Worcester	181,479	171	94.2
Seattle	319,659	253	68.5
New Haven	163,872	140	85.4
Portland, Ore.	260,478	216	82.4

Cities—	Population	Deaths	Rate
Milwaukee	460,894	381	82.7
Omaha	196,000	148	75.5
Grand Rapids	138,822	98	70.6
Spokane	104,194	72	69.1
Syracuse	173,393	112	64.6
Rochester ..	299,015	189	63.2

Mortality from Tuberculosis, Newark, N.J.

(Rate per 100,000 Population)



TOTAL DEATHS AND DEATH RATES PER THOUSAND,
AND DEATHS AND DEATH RATES FROM PUL-
MONARY AND OTHER FORMS OF TUBER-
CULOSIS SINCE 1900

YEAR	Total Deaths	Total Death Rate per M	Total Deaths Pulmonary Tuberc	Death Rate Pulmonary Tuberc.	Total Deaths All Forms Tuberc.	Death Rate All Forms Tuberc. per M.
1900	5,000	20.34	608	2.45	676	2.74
1901	4,806	19.22	581	2.33	630	2.52
1902	4,943	19.38	556	2.18	660	2.59
1903	4,871	18.50	606	2.35	718	2.79
1904	4,678	19.77	651	2.39	778	2.84
1905	4,771	17.74	647	2.28	781	2.75
1906	4,771	19.14	685	2.36	851	2.93
1907	4,774	18.08	685	2.28	797	2.65
1908	5,507	17.07	628	2.06	795	2.60
1909	5,470	17.77	595	1.92	764	2.45
1910	5,484	16.64	681	1.96	812	2.40
1911	5,777	15.16	594	1.66	707	2.01
1912	5,437	14.65	506	1.37	596	1.61
1913	5,277	14.63	631	1.66	738	1.93
1914	5,890	14.70	583	1.47	676	1.71
1915	5,387	14.30	687	1.63	808	2.12
1916	6,117	16.50	695	1.77	768	2.03
1917	6,905	15.30	704	1.74	820	2.02
1918	8,483	19.73	683	1.59	798	1.90
1919	9,534	12.57	802	1.26	687	1.45
1920	5,111	9.41	470	0.78	547	1.00

DEATHS FROM ALL FORMS OF TUBERCULOSIS, ARRANGED BY MONTHS AND SEX, FOR THE YEAR 1920

MONTH	PULMONARY			OTHER FORMS			Grand Total
	Male	Female	Total	Male	Female	Total	
JANUARY	33	16	49	4	2	6	55
February	31	19	50	4	3	7	57
March	25	9	34	6	6	12	46
April	26	18	44	5	2	7	51
May	26	12	38	8	1	4	42
June	29	14	43	2	2	4	47
July	23	10	33	3	4	7	39
August	28	16	44	6	2	8	52
September	14	19	33	1	1	2	35
October	13	21	34	7	3	10	44
November	19	10	29	1	1	2	31
December	24	16	40		1	1	41
Total	290	190	470	42	23	70	540

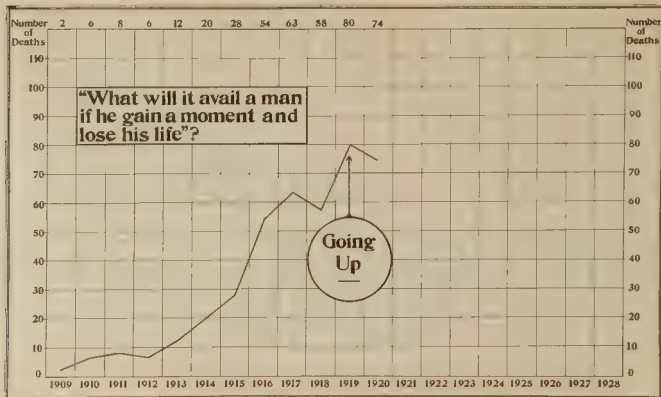
ACCIDENTS AND HOMICIDES

There were 278 deaths from accident during the year, being 26 less than for the previous year, the greater number being in males, 200, to 78 females. There were 41 deaths under 5 years and 63 between 25 and 44 years.

Deaths from homicide numbered 14, a decrease of 12 from the 1919 figures.

The decrease in the accidental deaths is gratifying in so far as it indicates a greater care taken by the public to reduce deaths from this cause. In the following table the deaths from accident are classified under definite causes. Deaths from automobile accidents being the least with 74 being 6 less than for the previous year. This is a welcome sign. There still exists, however, the necessity for a better observance of city regulations and traffic regulations to further reduce this most preventable of all deaths.

Number of Persons Killed in Automobile Accidents in Newark, N.J.



Vital Statistic Division, Dept. of Health, Newark, N. J.

DEATHS FROM ACCIDENTS FOR YEAR 1920

CAUSE OF ACCIDENT	MALES					FEMALES					TOTALS				
	All Ages	10	15	20	25 and over	10	15	20	25 and over	All Ages	0-4	5 to 19	20 to 59	60 and over	
		10	15	20	25 and over	10	15	20	25 and over		10	15	20	25 and over	
Conflagrations	6		4	2	3		3	2	1		9		6	3	
Burns and scalds	10	5		4	1	1		5	3		27	14	5	7	1
Illuminating gas	27		2	17	6	6			4	6	27		2	23	12
Automobile injuries	52	3	18	19	9	3	3		4	7	74	11	27	23	13
Trolley injuries	12	1	1	7	3					9	14	1	1	7	5
Steam railroad injuries	16		2	1							16		2	14	
Drowning	11		4	6	1	1		1			12		6	6	1
Electricity	5		1	4							6		1	4	
Explosions	3			3							3			3	
Elevator	8			3							3			3	
Wagons	2	1		1		1	1				3	9		1	
Motorcycle	2		1	1						1	3		1	1	1
Bicycle	1			1							1			1	
Crushing	11		1	10							11		1	10	
Poisoning	6			2		1			1		4			3	1
Suffocations	2	9				7	5				7	7			
Falls	29	3	6	14	6	7	1		1	10	41	4	6	15	16
Fractures	2			2							2			2	
Other Accidents	3	1	1	1		1	1		2		6	2	1	3	
Total	200	16	41	117	30	15	16	8	16	21	278	41	58	129	50

DEATHS AT AGE PERIODS

Among the 5,551 deaths for the year, the greatest number at any age period was under 5 years, 1,439 deaths, and of these nearly 70 per cent. were under one year of age.

The mortality between 45 and 64 years was 1,379, and between 25 and 44 years the deaths numbered 1,041. The principal causes of death at these age periods and the percentage to all deaths from such causes are shown in the following table:

DEATHS FROM SCARLET FEVER, TYPHOID FEVER AND DIPHTHERIA PER 100,000 POPULATION, 1894-1920

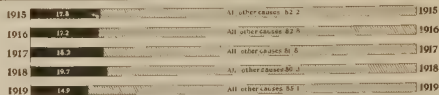
Year	Scarlet Fever	Typhoid Fever	Diph- theria
1894	33.8	16.7	...
1895	16.2	23.2	126.6
1896	7.6	20.9	96.9
1897	23.5	14.3	59.6
1898	6.4	17.4	56.6
1899	14.2	25.0	51.7
1900	22.4	20.3	58.1
1901	9.2	22.8	41.2
1902	18.0	18.4	41.2
1903	26.7	23.7	45.1
1904	44.1	14.7	55.1
1905	15.9	14.1	38.8
1906	11.7	17.2	34.1
1907	13.7	23.0	31.7
1908	29.2	11.5	21.6
1909	22.5	12.5	33.8
1910	11.2	12.7	29.9
1911	6.0	10.5	21.0
1912	3.0	7.0	24.6
1913	6.9	7.9	28.9
1914	6.8	6.6	10.4
1915	1.6	2.9	13.1
1916	1.8	6.0	14.8
1917	0.7	4.2	12.3
1918	2.6	3.5	19.1
1919	2.7	2.0	11.3
1920	2.9	1.9	14.9

PERCENTAGE DISTRIBUTION BY AGE PERIODS FROM PRINCIPAL CAUSES OF DEATHS, 1920

CAUSES	TOTAL AGES		UNDER 5 YEARS		5-14 YEARS		15-44 YEARS		45-64 YEARS		65 YEARS AND OVER	
	Deaths		Deaths		Deaths		Deaths		Deaths		Deaths	
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Males	8	100.00	8	100.00								
Whooping Cough	56	100.00	56	100.00								
Diphtheria	62	100.00	48	77.42	14	22.58						
Scarlet Fever	100	100.00	80	80.00	20	20.00						
Measles	70	100.00	56	80.00	14	20.00						
Chickenpox	100	100.00	80	80.00	20	20.00						
Tuberculosis of Lungs	470	100.00	5	1.06	100	23.20	222	47.23	117	24.89	17	3.62
Diarrhoeal Diseases, (Under 5 years,	244	100.00	244	100.00								
Congenital Deformity and Mal- formation	402	100.00	402	100.00								
Heart Disease	100	100.00	1	1.00	70	70.00	2	2.00	10	10.00	17	17.00
Stroke	100	100.00	1	1.00	70	70.00	2	2.00	10	10.00	17	17.00
Organic Brain Disease	100	100.00	1	1.00	70	70.00	2	2.00	10	10.00	17	17.00
Cancer	100	100.00	1	1.00	70	70.00	2	2.00	10	10.00	17	17.00
Accidents	100	100.00	1	1.00	70	70.00	2	2.00	10	10.00	17	17.00

Deaths from Bronchitis & Pneumonia under one year of age Newark, N.J. 1915-1919

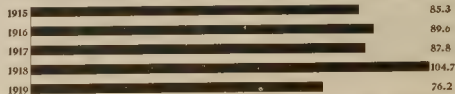
Proportion of total Deaths under one year of age due to Deaths from Bronchitis and Pneumonia



Death Rate from Bronchitis and Pneumonia per 1000 Births



Infant Mortality Rates for Five Years (Deaths under one year of age per 1000 living Births)



COLORED MORTALITY

There were 443 deaths among a colored population of 17,011, making a mortality rate of 26.0 per 1,000 for these people. This rate is twice the general death rate for the city for 1920. The most common cause of death was pneumonia, 88 deaths, with tuberculosis of the lungs second with 60 deaths.

Deaths from congenital debility numbered 138, and Bright's disease 34. A community claimed for the colored against influenza is not shown in these figures, 26 deaths being recorded under this head for 1920.

Total number of colored births.	542
Total number of colored deaths under one year	88
Colored infant mortality rate	16.23
Colored infant mortality rate (deaths under one month)	6.4
Total number of colored deaths under one month	35

INFANT MORTALITY RATE

84.7 per 1,000 Births

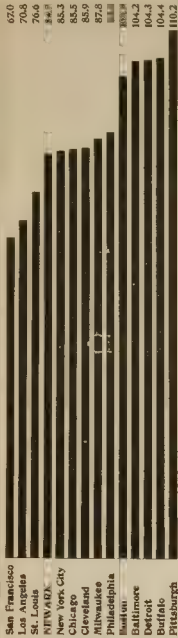
The deaths under one year numbered 994, making an infant mortality rate of 84.7 per thousand births. This rate is established upon actual recorded births in the city. The rate is higher than in 1919, principally as a result of the prevalence of influenza, measles and pneumonia in children under one year. The infant mortality for the year was, however, a comparatively low one for the city, as the following tables will show:

INFANT MORTALITY RATE PER 1,000 BIRTHS

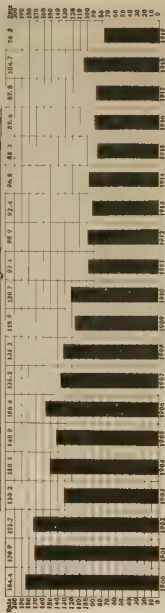
Year	Rate
1916	89.6
1917	87.8
1918	104.7
1919	76.2
1920	84.7

Infant Mortality Rates of the 14 Largest Cities in the United States, 1920

(Deaths under one year of age per 1,000 living Births)



Newark's Infant Mortality Rate 1900-1919



Division of Vital Statistics, Dept. of Health, Newark, N.J.

The extraordinary low rates published by some city health departments are not reliable or true when the rate is calculated upon an estimated birth rate. This is the case with one of the largest cities in the country, which thus gains a reputation for child hygiene work not in conformity with known facts.

Newark ranks fourth in the list of fourteen large cities for infant mortality.

INFANT MORTALITY RATES OF THE FOURTEEN LARGEST CITIES IN THE UNITED STATES, 1920

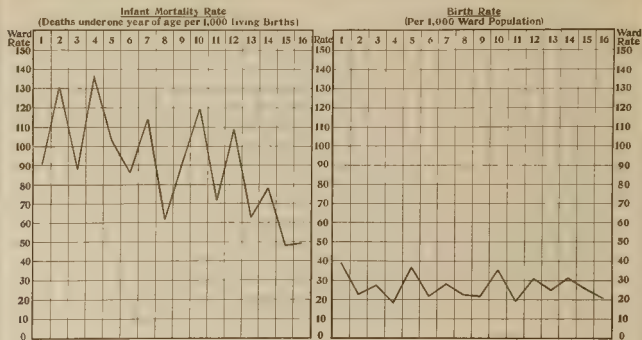
	Rate
San Francisco	67.0
Los Angeles	70.8
St. Louis	76.6
NEWARK	84.7
New York City	85.3
Chicago	85.5
Cleveland	85.9
Milwaukee	87.8
Philadelphia	88.9
Boston	100.9
Baltimore	104.2
Detroit	104.3
Buffalo	104.4
Pittsburgh	110.2

BIRTH RATE

28.3 per 1,000

The births for 1920 numbered 11,734, making a rate of 28.3 per thousand of population, as compared with 25.7 for 1919. The average birth rate for the five years 1915 to 1919 was 28.14. The birth rate, which during the war years was considerably lowered, appears now to approach more nearly that of the average, and exceeds that of the five-year period. Immigration of young parents of foreign birth, formerly a large factor in our birth statistics, is still lacking the volume

Infant Mortality and Birth Rates by Wards in Newark, N.J. 1920



Division of Vital Statistics, Dept. of Health, Newark, N.J.

of former years. Until all immigration restrictions are removed the birth rate will tend to remain the same and finally to fall, in accordance with the experience of countries whose populations are stationary.

CLASSIFICATION OF BIRTHS IN 1920

		Rate per 1,000 Population
Males	6,637	14
Females	5,697	13.7
Total	11,734	28.3
White	11,186	27.6
Colored	542	13
Yellow	3	
Indigenes	127	6.7
Still Births	468	11

MARRIAGE RATE PER THOUSAND POPULATION

1920	28.3	1919	30.8
1919	25.7	1918	27.7
1918	27.6	1917	27.6
1917	29.1	1916	27.6
1916	29.7	1915	27.1
1915	27.2	1914	25.8
1914	29.0	1913	26.4
1913	28.4	1912	25.2
1912	29.3	1911	24.9
1911	34.9	1910	24.8
1910	29.6		

THE PREVALENCE OF EPIDEMIC DISEASES

The reason for the increased mortality for 1920 is apparent when we review the record of reportable diseases during the year. There were 31,167 cases reported during 1920, as compared with 16,890 for the previous year. The increased prevalence was mainly under the heads of influenza, measles, whooping cough and their complications. The following table gives the increased prevalence as compared with 1919:

Diseases Reported—	1920	1919
Influenza	9,388	4,203
Measles	6,688	661
Whooping Cough	3,259	642
Pneumonia, Lobar	2,221	1,662
Pneumonia, Broncho	1,786	1,227
Mumps	800	306
Scarlet Fever	896	820

A few diseases showed lessened prevalence including diphtheria and chickenpox:

Diseases Reported	1920	1919
Diphtheria	1,022	1,565
Epidemic Meningitis	29	42
Chickenpox	1,127	1,507

The year 1919 showed a high prevalence of respiratory epidemic diseases following upon an unusually severe and long continued cold spell during the first three months of the year. The same condition did not produce an increase in those diseases not essentially respiratory, such as diphtheria, typhoid, and chickenpox, again exemplifying the close relationship between climate where excessive cold causes exposure, as well as close contact in artificially heated rooms and houses, and the spread of those epidemic diseases so constantly present in all large cities.

TABLE 1920 DEATHS AND CAUSES AS COMPARED WITH FIVE-YEAR PERIOD 1916-1920

The following table shows the total number of deaths from each given cause, together with the percentage of each cause contributed to the total:

CAUSE OF DEATH	Number of Deaths 1920	Per Cent of Total	Number of Deaths 1916-1920	Per Cent of Total
Total, All Causes	5,551	100.00	32,130	100.00
Infantile Paralysis	7	0.13	402	1.25
Typhoid Fever	8	0.14	72	0.22
Malaria			1	0.01
Smallpox				
Measles	50	0.90	284	0.88
Scarlet Fever	12	0.22	45	0.14
Whooping Cough	56	1.01	199	0.62
Diphtheria	62	1.12	300	0.93
Influenza	222	3.99	1,945	6.05
Epidemic Meningitis (Cerebro- Spinal)	16	0.29	148	0.46
Other Epidemic Diseases	1	0.02	9	0.03
Tuberculosis of Lungs	470	8.47	3,094	9.63
Tuberculous Meningitis	34	0.61	239	0.74
Other Tuberculosis	36	0.65	245	0.76
Cancer, Malignant Tumor	368	6.63	1,753	5.46
Simple Melanoma	31	0.70	187	0.58
Amyloidosis	297	5.35	1,622	5.05
Organic Heart Disease	497	8.96	2,787	8.68
Bronchitis	105	1.89	673	2.09
Pneumonia, Lobar	454	8.18	2,965	9.23
Pneumonia, Broncho	302	5.44	1,460	4.55
Other Respiratory Diseases	84	1.51	550	1.71
Diseases of the Stomach (Cancer excepted)	45	0.81	299	0.93
Diarrhoeal Diseases (under 5 yrs)	244	4.40	1,449	4.51
Appendicitis and Typhlitis	60	1.08	296	0.92
Hernia, Intestinal Obstruction	36	0.65	218	0.68
Cirrhosis of Liver	32	0.58	245	0.76
Bright's Disease	507	9.13	3,042	9.47
Diseases of Women (not Cancer)	4	0.07	84	0.26
Puerperal Septicaemia	22	0.40	65	0.20
Other Puerperal Diseases	45	0.81	166	0.52

CAUSE OF DEATH	Number of Deaths 1920	Per Cent of Total	Number of Deaths 1916-1920	Per Cent of Total
Congenital Debility and Malfor- mation	402	7.24	2,054	6.39
Old Age	34	0.61	226	0.70
Accident	278	5.01	1,570	4.89
Homicide	14	0.25	99	0.31
Suicide	47	0.85	272	0.85
Ill-defined Causes	2	0.04	5	0.02
All Other Causes	664	11.96	3,060	9.52

INFLUENZA AND PNEUMONIA

The expected return of influenza was realized in the early months of the year. Commencing with 48 reported cases in December, the disease rapidly spread in the city, so that by the end of January 3,542 cases had been reported. This number rose to 5,416 for February, which was apparently the peak month of the visitation.

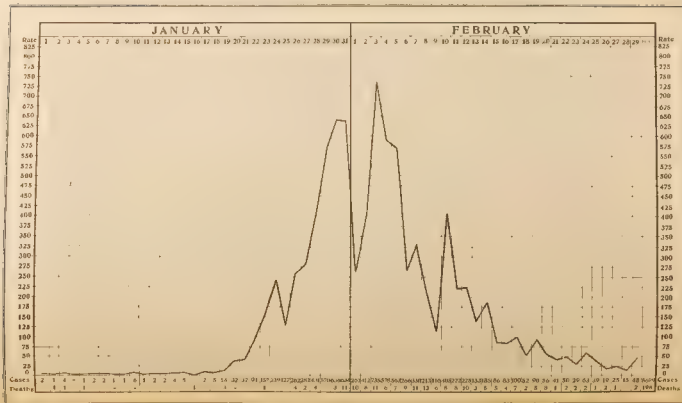
In March only 293 cases were reported.

The rise in pneumonia was coincident with the influenza epidemic. The total number reported for the year of both types was 4,007. Commencing with 321 cases in December, the total rapidly rose to 791 in January and a high total of 1,194 for February. Part of this high pneumonia incidence was due to the presence of measles, which became epidemic in the city during the months of March and April.

MEASLES

There were 6,688 cases of measles reported during the year, the greater number being in the first six months. Every ward in the city was eventually visited by the disease, although the death rate from it was apparently low. The singular mortality of measles in the very young is clearly shown, for of the 50 deaths from this cause all were under 5 years. The same may be said of whooping cough.

Influenza Epidemic, Newark, N.J. 1920



VENEREAL DISEASES

There were 1,446 cases of venereal diseases reported to the department during the year, of which 817 were gonorrhoea, 591 syphilis and 38 chancroid.

The special efforts made by the Bureau of Venereal Diseases during the war have been continued into the reconstruction period. In co-operation with the State and Federal authorities, the campaign of publicity has been carried on through the year. A moving picture film, "The End of the Road," was bought from the American Social Hygiene Association and shown every week during the winter months at the Y M C A and the Y W C A in Newark. It is calculated that by its means 50,000 young women of the city have been enabled to get their first knowledge of venereal diseases. Also lectures and lantern slides have been given to thirty-one clubs and organizations during the year.

Although it is impossible to state with any accuracy the extent of venereal disease prevalent in a community, it has been estimated by authorities in this country and abroad. In 1914 White stated that in Great Britain "the number of persons that have been infected with syphilis, acquired or congenital, cannot fall below 10 per cent. of the whole population in large cities, and the percentage infected with gonorrhoea must greatly exceed this proportion." A similar estimate was made for America by Gerrish in 1910.

Such figures reveal the enormous number of afflicted persons in the average city and clearly show the necessity for a complete change in our attitude towards venereal diseases. Without in any way condoning immorality, the situation with regard to syphilis and gonorrhoea should be laid bare and the facts dragged from the obscurity and secrecy that surround them at present.

Young men and women are more vitally in need of information upon these diseases than in any other problem of pub-

lic health. The public attitude and the interest aroused in this subject were illustrated last winter by the unusual attendance of women to see the social hygiene film, "The End of the Road." It clearly shows to our satisfaction the eager wish of the rising generation for information and guidance.

The subject has so far only been touched; much remains to be done for the future. The necessary instruction upon sex should come not only from the homes, but from the schools, colleges and social clubs, and should complement information upon venereal diseases. False modesty is suicidal for the race; truth will not hurt when told in a clean and fearless way. Only by a free and earnest effort by parents, teachers and physicians will the required knowledge be available to eliminate venereal diseases in the community.

Our fight against this social peril will be considerably handicapped unless there is available adequate treatment for venereal diseases in dispensaries and hospitals. In many general hospitals no beds were available until recent years for patients with syphilis and gonorrhoea and few dispensaries had any adequate equipment for their treatment. Furthermore, it was the policy of most hospitals to refuse admittance to all such cases. Pitiful in the extreme was the fate of such cases, driven to home treatment, unable to pay for high priced drugs or operations by skilled experts, and the end resulting in the loss of hundreds of useful citizens, cut off in their prime.

For the first time in the history of this country it has been made possible by the co-operation of local, Federal and State authorities to offer every person affected with a venereal disease prompt and modern treatment for his or her condition. Dispensaries now are free and supply treatment and medicine. Hospital beds are available for suitable cases. Over all the country is established a Bureau of Venereal Disease in the Department of Health. The functions of the bureau

are directed not only towards the control, but the extirpation of venereal diseases. Its prime policy is to insure that all persons suffering from gonorrhoea or syphilis are properly treated. Its records are confidential and never divulged.

Venereal diseases, in spite of popular belief, do not get well of themselves. Initial symptoms may apparently abate without medical treatment, but the affected individual becomes not only a carrier of a disease capable of infecting at any time an innocent person, but also has within the system germs of future ailments. Our hospitals and State and County asylums are silent proofs of opportunity neglected, of foolish disregard of the future and of criminal negligence of a civic responsibility to the community.

DIPHTHERIA

The unusual prevalence of diphtheria during 1919 was not continued into 1920. There were 1,022 reported cases, 543 cases less than in the previous year, and comparing favorably with previous years, as the following table shows:

DIPHTHERIA CASES REPORTED IN SIX YEARS,
BY MONTHS

	1915	1916	1917	1918	1919	1920
January	146	138	79	81	128	129
February	138	88	81	112	169	94
March	160	70	84	95	148	95
April	90	85	70	112	172	60
May	83	103	77	63	149	68
June	51	73	73	57	126	72
July	58	60	44	65	90	47
August	51	38	35	48	64	34
September	71	24	59	84	72	44
October	90	63	103	87	121	92
November	112	105	108	76	182	146
December	160	76	57	94	137	139
Total	1210	923	870	974	1565	1022

The deaths from diphtheria numbered 62 for the year, making a rate of 14.9 per 100,000 population. In the deaths from diphtheria preventive medicine is handicapped by the ignorance of the public of the danger of all sore throats in children, with the result that diagnostic swabs are not taken and the patient's condition is desperate when the physician is called.

There is no excuse for failure to protect children by ordinary and reasonable precautions. Diphtheria culture outfits and diphtheria antitoxin are provided free by the city in unlimited amounts. Every death from this disease is a failure in applying certain diagnostic methods and giving the sovereign remedy, antitoxin, in time to save the little patient's life. In the 62 deaths recorded, 48 were under 5 years and 13 between 5 and 14 years.

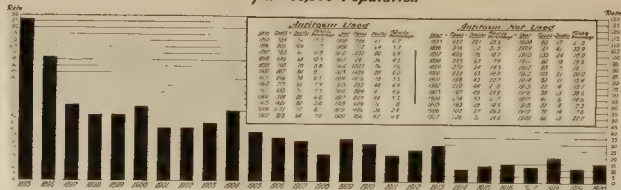
SCARLET FEVER AND WHOOPING COUGH

As is the case with other epidemic diseases, scarlet fever is generally represented by a mild type. The mild form of scarlet fever—by that meaning symptoms of a transient rash, sore throat and slight indisposition—has been our experience with the disease during 1920. It is, however, an affection which cannot be said to have lost any of its possible dangers of initiating fatal cases in very susceptible children. Beginning in October, 1920, cases of this nature were constantly reported, numbering 361 for the last three months of the year. The mortality from this cause for this period was, however, under 2 per cent. of the reported cases.

The year was one of high prevalence for whooping cough in every month, the peak of the prevalence being reached in July with 460 reported cases. The total for the year was 3,259, as compared with 642 reported during 1919. The disease is much more fatal than is ordinarily known to the public. The 56 deaths reported from this cause were all under 5 years, making a mortality rate of nearly 2 per cent. of the reported cases.

Reduction Of Diphtheria Mortality In Newark, N. J. As The Result Of Antitoxin, 1895-1920

Rate per 100,000 Population



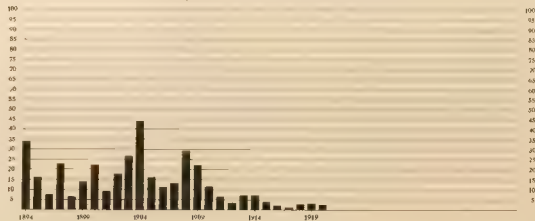
Doses of Antitoxin Distributed



Division of Vital Statistics Dept. of Health, Newark, N. J.

Mortality from Scarlet Fever

(Rate per 100,000 Population)



POLIOMYELITIS, AN UNWELCOME VISITOR

Twenty cases of infantile paralysis and seven deaths were reported during the year. These were nearly all during the latter half and distributed as follows:

	Cases	Deaths
First Six Months.	1	1
July	2	1
August	3	1
September	8	3
October	4	0
November	2	1
December	0	0
	—	—
	20	7

Since the country wide epidemic of acute anterior poliomyelitis, or infantile paralysis, experienced in 1916, there have been from time to time isolated outbreaks reported from various parts of the country.

These have seemingly been localities having escaped the pandemic of 1916, or probably delayed flare-ups of susceptible communities. It is apparent, however, that the infection of poliomyelitis is at this time extremely widespread, a review of the disease in the various States indicating quite unusual prevalence. In the report of the Public Health Service for October 1, 1920, poliomyelitis was reported from thirteen States.

The point of grave importance is the possible seeding of the country by such local areas of infection. It is the experience in most epidemics that the full tide of the disease is preceded by cases of a mild nature widely distributed. If this holds good for poliomyelitis, the increased number of cases reported this year is probably indicative of a larger epidemic to be experienced next summer. It must be remembered, however, that there is a possibility of this infection being carried over to

next year, so that we should at least face this contingency of an increased number of cases with their resulting disability in the summer of 1921. Of course, the possible reappearance in epidemic form will depend very much upon the extent of the disease throughout the country. Should poliomyelitis become pandemic next summer, this city no doubt will suffer its full quota of infection. It is impossible to state how far during the last epidemic all susceptible children suffered from the disease. If the infection becomes widespread in this State next year the amount of material cannot be reasonably as great as was that in 1916. It would probably be a much greater menace if such a disease were experienced after an absence of ten years or more, when its onset would find a very much greater number of children liable to infection.

HOW SHALL WE PREVENT EPIDEMICS?

Community action, Hunter believed, should go hand in hand with the sanitarian in the relief from diseases. Experience has well demonstrated the truth of this belief, for wherever the people themselves have realized the value of clean living, there epidemics and sickness have become a negligible quantity. A glance at our records, published from time to time, will show that disease, unnecessary disease, is still with us. From year to year the number of fatalities swings.

If we ask: Are the above diseases preventable? we must give an affirmative within limitations. They would be preventable were it possible to isolate every case as soon as active symptoms became evident. In spite of improved living conditions, better wages, more nourishing foods, more healthful work places, more education, it must be admitted that our usual toll of sickness and death is a signal failure in sanitary methods. Every case of communicable disease is visited and the family advised as to contagion and the requirements of isolation, every case is kept under supervision or inspection

by sanitary inspectors. Why, therefore, this manifest spread of infection? The answer must be that we have lacked some important factor, and that is the active co-operation of each individual and each family unit. Much of this is the result of lack of knowledge of infectious diseases and very frequently to general indifference as to the personal responsibility of one's family to the community. Another attitude is difficult to combat.

DISEASE IS NOT INEVITABLE

There is a fatal yielding to the old beliefs that contagious disease is inevitable. This is not so. For every experience has proved that proper isolation of the first cases of an epidemic may stamp it out in any community. We should get down to the basic facts we at present know and disregard popular beliefs and superstitions, which are the heritage of ignorance. We have progressed very far on lines of modern civilization, so that our congested areas are becoming less and less pest holes and their inhabitants no longer live under conditions predisposing to plagues and epidemics.

In judging, however, of public inertia it is well to remember that we have passed through various stages of information of the causes of disease and that what has been discarded by scientists is very frequently still held as a belief by the public. The plagues of Egypt were probably disease visitations brought about by departure from known sanitary ways of living; it is known that bubonic plague is conveyed by rats and not through improper ventilation; malaria is caused by the bite of an infected mosquito and not by exposure to mists or fogs or living upon marshy ground. A little while ago diphtheria was considered a disease mostly associated with houses where drainage was defective, a hypothesis fathered by the early sanitarians themselves. We now know that this is not so; that diphtheria is carried from child to child, by undiscovered or recovered cases, or by a

human carrier of the disease with no symptoms. Even a persistent cold in the nose may be a diphtheria infection in a child. Typhoid fever is not due to run down conditions or worry or business strain, for it is the direct infection of a person by contact with polluted food or water, or from the infected body secretions of a previous case.

Tuberculosis was formerly looked upon as quite an elegant kind of disease to suffer from—a kind of decline—in which the main treatment consisted of keeping the person in heated rooms with no ventilation and that such a person was started on his road to disease by disappointment in love or business failure or some other abstruse cause. We know now that tuberculosis is a contagious disease, the person suffering from tuberculosis is the center of infection, and that the worst possible treatment of this condition is hot rooms and deficient air. Such persons do better in the open air, and to guard the members of the family from infection the same course should be taken as in the case of scarlet fever, the discharges of the patient should be sterilized or disinfected. It was also considered that tuberculosis was hereditary. It is now recognized that this is not so. No child is born into this world with tuberculosis, in this respect Providence in a bounteous mood made all men and women equal. Further, we can say that no child is born into this world deformed, except when brought about by disease conditions in the parents.

CLEAN LIVING—ESSENTIAL

Much has been done in recent years in showing the necessity of living in a clean surrounding, of cleanliness of the body as well as in household methods. It is just as necessary to have clean habits and manners, and although it is difficult for any one to prove the hazard to health contained in leaky drain pipes, dark cellars and rubbish accumulations, such conditions do have an effect on the life of the individual, inasmuch as they dispose to carelessness and uncleanness.

It may be said that the child and the young mother should be impressed with the need for a clean household; that it should be conveyed to the individual citizen as a personal responsibility to keep any infection he may have from his neighbor.

MODERN SCIENCE DOES NOT RECOGNIZE PREDESTINATION THEORY

Not many years ago the old theory of predestination was commonly applied to all our early happenings. It was told that one's life was "cut and dried" before birth, that a broken arm had already been arranged for countless years before. We have a better theory, that of predetermination. By predetermination is meant that any action along one line will naturally shape or determine another action along consequential lines. It is evident, therefore, that the effect of a good action will have a great influence and in this way create the habits and manners of a community, which in turn will gradually raise in a sanitary way every individual.

HEALTH DEPARTMENTS HAVE THE FUNCTION TO LEAD IN HEALTH WORK

Health work is limited in the sense that the work of a police, fire or building department is limited. Much of the former work of health departments in the past was concerning the improvement of local conditions, cleaning up streets, roads, and premises where garbage and accumulations of animal matter, rubbish, etc., existed.

It is encouraging to notice that as each lesson in public health is learned it becomes a part of the daily life of the community. The citizen can easily be depended upon to follow upon the road of sanitation. It is necessary, however, to tell ourselves of superstition of all sayings and old beliefs. Modern teaching says disease is due to contagious material that is transmitted from person to person. There is no mystery about it. We are long past the stage when mystery

enshrouded the cause of disease, when, as Lord Avebury said, "The horrible threat of unknown evil hangs like a cloud over savage tribes, embittering their every prayer and destroying every good thought in their minds."

What, then, should be the fundamentals of knowledge upon disease control? It is that all epidemic children's diseases are preventable. It is true that definite means of infection in some diseases is unknown and many years must elapse before control will be perfected in infantile paralysis and influenza. The others are preventable in the true sense of the word, inasmuch as we know where the infection is and how it is carried.

MOTHERS AND GIRLS SHOULD TAKE HEED

It is our young mothers and our young girls who are to be mothers who should be told those things in the upbringing of children which would prevent infection. They should be impressed with the fact that the breast-fed baby is by far the most healthy and less liable to outside infection. The proper care of children in disease, as well as in health, should be part of the school curriculum, including the safeguards against the spread of infection. How important it is to know that children of tender years are more in need of protection than at any other age. This is the time when the young and growing child is forming in its body defensive substances and antibodies which later enable it to withstand exposure to infection. The young mother or nurse should know that although the new-born child does in some measure inherit resistance to infection from its parents, this is lost a short time after birth and only after many years of life is it fully protected by the production of antibodies which are bacteria destroying ferments in the blood, enabling the healthy organism to defy the onset of most common diseases.

There will come a time when quarantine and isolation laws will play minor parts in the control of epidemics. Their places will be taken by wider knowledge and a more personal recognition of a duty to one's neighbor and the community.

MORBIDITY REPORT, AGE GROUPS, 1920

DEPARTMENT OF HEALTH

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1920	Male	Female	White	Black	Under 1 Year	1	1	1	3	4	Total Under 5 Yrs.	5 to 9	10 to 14	15 to 19	20 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65 to 74	75 to 84	Over 85	Total
Diphtheria	494	38	68	14	70	87	98	19	108	412	295	183	1	50	34	14		4	1		1		1,022
Scarlet Fever	448	42	800	6	11	17	41	12	83	594	444	158	30	7	27	7			1				896
Erythema Fever	39	2	90	2							8	6	16	8	11	8		4					92
Measles	839	376	6340	348	423	567	800	716	778	3283	2823	337	199	35	39	8							6658
Whooping Cough	674	183	7066	16	108	260	494	474	397	1963	1197	103	42	3	7	4							2359
Epidemic Meningitis	18	11	29		5	5	1	8	2	16	7	1	1	1	2	1							29
German Measles	92	94	183	2	9	9	17	17	18	70	94	15	3	5	3	1							186
Pneumonia Lobar	1244	967	9677	144	138	177	178	123	83	699	281	27	104	143	284	988	100	121	54	23	3		2,921
Pneumonia Bronch	938	828	1693	93	236	286	171	125	82	960	87	89	45	8	164	110	80	54	34	21	0		1,746
Croup	699	18	981	146	47	65	114	113	108	44	364	70	23	11	10	2							1197
Measles	487	367	764	96	7	18	33	44	51	153	117	11	5	8	49	13	2						800
Influenza	2914	474	9972	116	29	74	78	102	32	610	77	823	95	144	1884	1457	77	493	291	39	4		9388
Meningo-Enceph	14	17	30	1							5		2	5	7	5	4	3					13
Petechial Fever		15	15										1	9	5								15
Trachoma	11	17		5				1	1	2	4	1	4	4	5	1	1						22
Perforated Septicemia		9	18	1										11	6	1	1						19
Malaria	14	6	17	3				1	2	3	4	1	1	8	3	1							20
Erysipelas	15	123	997	7	15	2	2	3	2	24	5	10	9	14	40	23	8	36	15	4			288
Infantile Paralysis	1068	790	1590	190	77	10	14	11	16	68	18	117	18	36	413	340	259	76	23	1			1788
Of Infantile Paralysis	15	25		5	23	0	2	3		30													30
Epilepsy	91	6	25	2							9	1	4	5	2	4	1	2					27
Infantile Paralysis	16	4	19	1	6	1	1	4	0	14	0	2	1	2	4	8	1	2	1				35
Lead Poisoning	24		19	5																			24
Syncope		4	4																				4
Deserters	10	7	17		4			2		1	1												17
Mercury Poisoning	0	2	4																				6
Arsenic Poisoning	2		2											1		2							3
Tetanus	1	1	1																				3
Trichinosis	1	1	2									1											1
Total	6127	13500	98170	1292	1337	1640	1974	1914	2061	8926	7188	2610	1720	2175	3000	2264	1341	781	348	83	15		90721

(This does not include Venereal Diseases)

FAITH HEALING AND CONTAGIOUS DISEASES

Another factor in preventing the application of life-saving measures in case of diphtheria is the spread of certain faith-healing beliefs. As long as the practice of such is confined to the adult sufferers, nothing but pity can be felt for their distorted viewpoint. When, however, a child suffering from contagious disease is denied the protection provided by society by its parents or guardians, then, by a recent verdict, the law of New Jersey deems such an offense sufficient for indictment by a Grand Jury.

SOCIETY INTERVENES

The verdict of manslaughter against a parent, the father, in such a case has been recorded during the year and can be regarded as a true vindication of human rights for the child. The jury, after hearing the evidence on behalf of the State in which experts were called to testify as to the remedies and safeguards provided by natural science on the one hand, and on the other the various hallucinations and beliefs of a set of persons who do not accept on common knowledge as knowledge, decided that society was after all the supreme arbiter. Until such time as society as a whole accepts such beliefs and approves them by the majority, shall be the accepted methods to be exercised by those under adult age.

THE PARENT RESPONSIBLE TO THE STATE

Society, therefore, demands that the children be protected by every accepted method of medicine and science. It defines very clearly the authority of the parent and points out the parents' responsibility in cases of sickness. It is clear that the opinions of the hour are not always compatible with the rules of society in other ways. Children are compelled to be educated, to be kept free from crime, to be brought up in such a way as not to be a hazard to the life and liberties of themselves and other citizens. Why, therefore, should not

the same responsibility rest with them with regard to freedom from disease. It is clear that the child cannot exercise judgment that its mind is not mature enough to accept principles for or against any particular belief. It is virtually a charge upon the public and the custodian of all children of tender age is society itself. Society, and its laws as exist upon the statute books concerning the safety and health of children, are thus vindicated by the jury selected from the people.

A SUMMARY OF 1920

POST-WAR CONDITIONS

The unusual social and economic conditions experienced in the city as the result of the World War disturbances were prolonged into 1920. The persistent house shortage, high rents and the continued high prices for certain of the necessities of life produced conditions of unrest, bringing about unusual demands for increases in wages by nearly every trade.

THE HEATING ORDINANCE

The severe climatic conditions of the winter 1919-1920 had its concurrent misfortune in the high prices and the scarcity of coal for household purposes. Landlords and lessees who were required by lease or contract to furnish heat in apartments and business premises were disinclined to use excessive quantities of high-priced coal. The results were that discomfort and privation occurred in many families. The demand for the protection of the public by some city ordinance requiring landlords to provide sufficient heat in apartment and tenement buildings resulted in the passing by the City Commission of the heating ordinance, containing the following requirements:

AN ORDINANCE to Regulate the Heating of Certain Buildings in the City of Newark

1. It shall be the duty of every person, firm or corporation who shall have contracted or undertaken, or shall be bound to, heat or to furnish heat for any building or portion thereof occupied as a home or place of residence of one or more persons, or as a business establishment where one or more persons are employed, to heat or to furnish heat for every occupied portion of such building or portion thereof so that a minimum temperature of sixty-eight (68) degrees Fahrenheit shall be maintained therein at all such times. Provided, however, that the provisions of this section shall

not apply to buildings or portions thereof used and occupied for trades, businesses, or occupations where high or low temperatures are essential.

For the purpose of this section, wherever a building is heated by means of a furnace, boiler or apparatus under the control of the owner, agent or lessee of such building, such owner, agent or lessee, in the absence of a contract for agreement to the contrary, shall be deemed to have contracted, undertaken or bound himself or herself to furnish heat in accordance with the provisions of this section.

The term "at all such times" as used in this section, unless otherwise provided by a contract or agreement, shall include the time between the hours of six o'clock in the morning and ten o'clock in the evening in a building or portion thereof occupied as a home or place of residence, and during the usual working hours as ascertained and established in a building or portion thereof occupied as a business establishment, each day whenever the interior temperature shall fall below fifty (50) degrees Fahrenheit.

The term "Contract," as used in this section, shall be taken to mean and include a written, verbal, or implied contract, lease or letting, and the presence of heating outlets, radiators, risers or returns in any hall or apartment, or subdivision of a house shall be prima facie evidence of an implied contract.

2. Any person, firm or corporation convicted of a violation of this ordinance shall, on the first conviction thereof, forfeit and pay a penalty of One Hundred Dollars, and on any second or subsequent conviction, shall forfeit and pay a penalty of Two Hundred Dollars.

The results in the passing of this ordinance were immediate. In the hundreds of complaints handled during the late winter of 1920 none were found that could not be adjusted by requests for sufficient heat to be furnished. Few landlords or lessees risked the penalty for the sake of a few tons of coal.

PHYSICAL EXAMINATION OF FOOD HANDLERS

Investigation of the records of the Department of Health has shown the presence of contagious communicable diseases among many food handlers in the city.

Although sufficient authority is present to follow up food handlers who are thus infected through the Division of Contagious Diseases, it has frequently been the experience that persons may evade control by changing their address or place of employment. It has long been felt that the only safe method of protecting the food supply is an examination of the food handlers at the places where they are employed. Sufficient authority required for such examinations is conferred in the State Sanitary Code, Chapter 6, Regulation 37, which states as follows:

"Any waiter, cook, or other person employed in any hotel, restaurant, boarding house or other place where cooked food is offered for sale, who handles or prepares food, may be required to submit to a physical examination by a medical inspector of a local board of health or of the State Department of Health, for the purpose of ascertaining whether or not he is affected by any communicable disease, whenever in the judgment of the health officer such examination may be necessary."

In every epidemic that has occurred in recent years the possibilities of infection by food have been considered and inspected. In influenza epidemics it has been shown by investigations that when methods of sterilizing utensils were employed and provision made for the health of food handlers a lower incidence from influenza was experienced.

The benefits to the public were so apparent in this examination that the proprietor of a hotel and restaurant and the owners was asked. Arrangements were made for the necessary examination to be made by department physicians free of cost. As a result, the assistant manager of a restaurant was

notified that no employee would be allowed to handle food without a certificate after examination by the department. A start was made in August, 1920, and by the end of the year 2,622 food handlers had been examined. The results obtained amply justified the procedure. Four hundred and twelve tuberculous suspects were found alone, among whom twenty-six were suffering from tuberculosis in an active state.

There is no more serious menace to the public than in the diseased food handler, for the reason that by the alimentary canal infection of most of our communicable diseases is conveyed. Only by progressive steps such as this can we give to the public the assurance of protection as the basis of the fabric of community life.

Respectfully submitted,

CHARLES V. CRASTER, M. D., D. P. H.,
Health Officer.

ANNUAL REPORT

OF THE

Division of Sanitation



ANNUAL REPORT
OF THE
Division of Sanitation

Dr. Charles V. Craster, Health Officer.

DEAR SIR — I herewith submit the report of the Sanitary Division for the year 1920:

SANITARY CONDITION OF THE CITY

The sanitary inspectors found that the condition throughout the city during the year had been an unusually good one from a sanitary point of view, due primarily to the mild and open winter, normal garbage collections, and the closer supervision by this department over the congested districts.

The Division of Sanitation has instituted a plan that we believe will greatly facilitate the follow-up work of the inspectors. We have drafted sixteen maps of the sixteen wards in the city, showing the streets and house blocks in each ward. Each inspector has designated on his individual ward map by inserting a map tack of six different colors the bad spots, lodging houses, tenement houses, chicken slaughter houses, stables, privy vaults and cesspools. By referring to these maps the inspector can at a glance ascertain just what sections of his district are in need of constant supervision. When a violation is abated the tack is removed, informing the inspector that that locality is no longer in need of frequent inspection, and therefore enables him to give his attention to more serious parts of his district.

The migration of Gypsies into the city during the year was larger than any previous year in our history. These people

cellar, even if stone wherever available under the present conditions were going to offer for sale copper wire of any size, and for poisoning for any coal fires, for the use of adults and children into the store, were doing so, and among very unsanitary conditions. The type is also unsanitary, and of sanitation and hygiene and invariably creates a veritable plague spot wherever he resides within city limits. Drastic action was necessary to compel these people to adhere to the most elementary rules of sanitation, to the city is afflicted with their presence only during the winter months.

STATE AND NUMBER OF LICENSES ISSUED BY THE SANITARY DIVISION FOR THE YEAR 1920, AS COMPARED WITH THE YEAR 1919

	1920	1919
Animal permits	89	101
Bird store licenses	10	11
Boarding house licenses	29	34
Chicken licenses	1,788	1,857
Commission house permits	36	33
Ice licenses	342	368
Refuse permits	39	50
Scavenger permits	2	1
Slaughter house licenses	45	34
Stall holders' permits	28	16

The following inspections were made during the year in the interest of the anti-fly campaign:

	1920	1919
Stables and cow barns	3,043	2,143
Manure accumulations	632	455
Scavenger dumping grounds	264	82
Inspection of yards	29,974	28,063
Number of yards found insanitary	4,613	3,611
Cattle and chicken slaughter houses insanitary	1,030	1,000

Of the 31 cases turned in to the Law Department, of which 15 cases are still pending and 33 cases discontinued. Costs of court were paid on 203 judgments were obtained on 65 cases.

WORK PERFORMED BY SANITARY DIVISION

	1920	1919	1918
Total number of inspections made.....	104,287	84,677	73,682
Inspections from complaint cards	6,149	4,367	5,662
Original inspections made	92,130	77,874	66,799
Special inspections made	6,008	277	230
Total number of reinspections made	34,460	23,133	24,511
Total number of nuisances found	28,227	21,915	25,772
Number of verbal notices served	12,238	9,294	7,681
Number of written notices served	5,968	4,722	5,663
Number of special notices served	343	118	218
Total number of notices served	18,549	14,134	13,562
Abatements from verbal notices	11,117	9,883	9,151
Abatements from written notices	11,838	10,377	13,915
Abatements from special notices	246	78	370
Total number of abatements	23,201	20,338	23,436
Alleyways inspected	14,910	12,712	11,244
Alleyways insanitary	2,117	1,667	1,621
Areaways inspected	11,753	9,812	8,099
Areaways insanitary	2,251	1,607	2,120
Cellars inspected	22,458	21,570	23,228
Cellars insanitary	3,054	2,747	3,462
Yards inspected	29,974	28,063	31,162
Yards insanitary	4,613	3,611	4,395
Cattle and chicken slaughter houses in- spected	1,030	1,000	581
Cattle and chicken slaughter houses in- sanitary	127	22	65
Cisterns and wells inspected	80	34	18
Cisterns and wells insanitary	12	14	6
Cisterns and wells closed	4	14	2
Factories inspected	1,583	981	577
Factories insanitary	534	179	83
Schools inspected	466	475	628
Schools insanitary	5	5	2
Stores inspected	5,686	4,000	4,294
Stores insanitary	416	370	303
Tenement houses inspected	9,069	4,971	5,486
Tenement houses insanitary	1,352	732	418
Houses unfit for habitation	37	27	24
Living rooms insanitary	2,219	1,007	806
Dark and windowless rooms	51	44	120

	1920	1919	1918
Theatres inspected	414	390	454
Theatres insanitary	43	14	28
Buildings with no city water supply	616	310	1,332
Buildings unprovided with water closet or privy vault	42	21	17
Buildings with roofs, storm gutters or leaders defective	1,768	1,115	892
Flumbing of premises defective	2,073	1,235	1,572
Sewer connections ordered	81	74	53
Pits under water closets defective	86	86	113
Water closets not supplied with water	1,848	909	2,548
Privy vaults and cesspools inspected	345	259	186
Privy vaults and cesspools insanitary	126	90	76
Privy vaults and houses ordered recon- structed	10	23	7
Privy vaults ordered cleaned and filled	69	56	20
Garbage and refuse accumulation	4,989	3,440	5,450
Stables inspected	3,043	2,143	2,429
Stables insanitary	627	507	537
Manure accumulation	632	455	851
Manure bins and pits uncovered	491	404	498
Streets insanitary	464	131	57
General inspection cards filed in office	323	83	37
Visits to agents and owners of real estate	3,348	2,064	1,889
Warning cards handed to violators of spitting ordinance	244	419	136
Arrests made for violating spitting ordi- nance	13	84	28
Days detailed to enforce spitting ordi- nance	21½	33	14
Number of spitting signs posted	99	95	61
Number of hours in court	510	447	407
Number of inspections for chicken and ice permits	4,051	2,267	1,781
Notices served for inspectors assigned to other districts	1,725	1,681	2,139
Dead animals reported	264	259	325
Complaints referred to other city depart- ments	140	131	148
Scavenger dumping grounds inspected	264	282	257
Quick summonses served	312	51	
Influenza cases investigated	2,576		

	1920	1919	1918
Clean-up circulars delivered.....	300	1,305	
Foodstuff circulars delivered	280		
Clinic cases investigated.....	300	296	
Coal card applications investigated.	10,000	"	
Pre-school clinic cases investigated.	177	566	

Reports on city scavenger conditions for the year 1920, as reported by the sanitary inspectors in the sixteen wards of the city, have been good, with the exception of the latter part of January and the month of February, at which time the collections in some sections of the city were poor, owing to weather conditions.

THE COAL SHORTAGE

The coal shortage during the fall of 1920 became so acute that it was necessary for the New Jersey Coal Dealers' Association, upon the request of the Health Department, to instruct their members to deliver coal only to families making application to this department. These applications were considered only where a case of sickness existed in the family and the same being certified to by the physician in attendance, or where children under five years of age or old and infirm persons resided.

All applications were investigated by inspectors detailed to this work and if verified were immediately delivered to the office of the secretary of the New Jersey Coal Dealers' Association. Here the same was arranged and distributed to coal dealers in every part of the city. Emergency cases were given the preference. The coal application had the name and address of applicant, the size and sort of coal desired in one-ton lots, also name and address of dealers who usually served applicant.

Our inspectors in investigating the applications in some instances found a plentiful supply of coal in the cellars of the persons applying under the pretense that there were small children in the family and the case should be considered an urgent one. Of course all of such applications were immediately rejected.

During the shortage this office was besieged by persons wishing to make application for coal cards and it was necessary to close our office in order to properly take care of applicants. It is noted during the shortage 40,000 coal cards were issued by this department.

Six tons of coal was purchased by the City of Newark at the suggestion of Mayor Cullen. This coal was distributed to the most deserving cases and names and addresses being taken from a preferred list drawn up in this office.

We wish to thank very sincerely the New Jersey Coal Dealers' Association, who so willingly co-operated with this department in relieving as far as possible the suffering caused by the coal shortage.

Respectfully submitted,

WILLIAM H. YOUNG,
Chief, Sanitary Division.

REPORT OF SPECIAL DETAILED INSPECTOR FOR 1920

Dr. Charles V. Craster, Health Officer.

DEAR SIR: I herewith present my annual report for year ending December 31, 1920:

There has been a slight decrease in the number of persons bitten by dogs for the year 1920—465—as compared with 493 for the year 1919. The brains of nineteen animals were examined at the laboratory—88% from out of the city. Of these, four proved to be positive for rabies and fifteen were negative. Four persons received the Pasteur treatment—the same number as for the preceding year. A record of each case and its subsequent history is kept on file at the laboratory.

The following table shows the figures with regard to the number of dog bites and rabies cases in Newark since 1910.

	Persons Bitten	Animals Examined	Positive Cases	Negative Cases	Persons Given Anti Rabies Treatment
1910	518	33	21	12	40
1911	350	28	13	15	26
1912	530	46	21	25	62
1913	612	43	17	26	41
1914	509	30	7	23	13
1915	506	38	3	30	3
1916	432	17	3	14	4
1917	506	42	20	22	31
1918	505	25	15	10	43
1919	493	19	5	14	4
1920	465	19	4	15	4
		—	—	—	—
Total	5,252	340	134	192	271

Following is a report on investigations in rabies work:

	1920	1919
Persons bitten by dogs	458	481
Persons bitten by cats.....	5	1
Persons bitten by horses and other animals	2	6
Total number of persons bitten and cases investigated	465	488
Original inspections	659	610
Reinspections (dogs under observation)	469	588
Final inspections (dogs under observation).....	387	428
Total number of inspections made.....	1,563	1,671
Cases reported by Police Department and investigated	182	132
Dogs bitten	54	51
Cats bitten	3	1
Dogs sent to pound and destroyed	51	61
Cats sent to pound and destroyed	2	3
Complaints investigated (dogs), miscellaneous.	82	80
Hours in court	8	5
Dogs' brains examined (negative, 11, positive, 2); total	13	14
Horses' brains examined	0	1
Dogs' brains examined (out-of-town) (negative, 4, positive, 2); total	6	3
Persons receiving Pasteur treatment	4	4

GLANDERS AND ANTHRAX

	1920	1919
Glanders cases investigated and stables disinfected	1	2
Glanders cases, reinspections	3	3
Cases of anthrax investigated	3	2
Samples of material bacterially examined for anthrax	7	5

ANTHRAX CASES

First Case Patient probably contracted anthrax while
 (Chinese worker employed to China used for
 making brushes)

Second Case—Patient probably received infection through the handling of infected hides imported from Montevideo, South America.

Third Case—Patient probably received infection through a cheap shaving brush.

All patients were inoculated with 40 c.c. of anthrax serum.

Microscopical examinations by Dr. R. N. Connolly, Bacteriologist, of some of the specimens procured showed the presence of anthrax bacilli.

SAMPLES OF WATER TAKEN FROM PUBLIC SWIMMING POOLS

	1920	1919
105 Halsey Street, Y. M. C. A. Swimming Pool	8	14
53 Washington Street, Y. W. C. A. Swimming Pool	8	14
10 West Park Street, Swimming Pool	5	14
145 Howard Street, Swimming Pool	6	14
32 Mercer Street, Swimming Pool	6	13
East Side Public Bath, Swimming Pool.....	7	12
36 Charlton Street, Swimming Pool.....	7	12
188 Broome Street, Swimming Pool (new)	2	—
Total	49	93

Sanitary inspections of all swimming pools are regularly made, samples of water for bacteriological analysis are regularly taken, and where pool water is found unduly high in bacteria, frequent chlorination of the pool water and the thorough cleansing of pool is insisted upon. Although swimming pool water can be kept fairly clean by filtration and reasonably safe by bleaching powder it is safest to exclude all possible sources of danger. Managers of bathing establishments have, therefore, all been notified that before using pool patrons must take a shower bath with a liberal use of soap, and to forbid and prevent all from using the pool who are apparently suffering from skin diseases, ulcers, sores or running ears, also that all bathing suits and towels are to be sterilized after each use. Hygienic conditions of our swimming pools were generally found satisfactory.

SAMPLES OF CITY WATER SUPPLY TAKEN AT THE
FOLLOWING PLACES FOR BACTERIOLOGICAL
AND CHEMICAL ANALYSIS

	1920	1919
Oak Ridge Stream	24	-
Clinton Stream	24	-
Kanouse Stream	24	-
Echo Lake Stream	24	-
Macopin Intake, inside of gatehouse	24	-
Cedar Grove Reservoir, outside inlet gatehouse	20	-
Belleville Reservoir, inside inlet gatehouse	29	-
Belleville Reservoir, outside outlet gatehouse	19	-
Board of Health Building, faucet, City Dispensary	18	-
Prudential Insurance Company Building	12	-
Alms House, Ivy Hill, N. J.	2	-
Butler, N. J., Water Supply	0	4
Number of inspections made in watersheds	112	108
Total number of samples taken	288	248
Number of visits to watersheds	16	-
Number of visits to Belleville Reservoir	19	22

The results of the bacteriological and chemical analyses of the city water supply and sanitary inspection at the watersheds have shown the water to be of high quality. Of the 61 cases of typhoid fever reported in Newark in 1920, only 1 was attributed to infection through city water. Practically all were traced to out-of-town sources, during the vacation season.

SAMPLES OF ICE TAKEN FOR BACTERIOLOGICAL
ANALYSIS

	1920	1919
Union Ice Company, 103 Newark Street	1	1
Newark Hygeia Ice Company, 309 Ogden Street	1	-
Orange Mountain Ice Company, 4 North Fourteenth St	1	1
Krueger Hygiene Ice Company, Murray Street	1	-
S. Alboum Ice Company, 55 Badger Avenue and 73 Hayes Street	2	-
Total	7	2

SAMPLES OF WATER FROM WADING POOLS

	1920	1919
Branch Brook Park.....	1	2
West Side Park.....	1	2
Weequahic Park	1	2
Total	3	6

SAMPLES OF WELL WATER TAKEN AT THE FOLLOWING
PLACES FOR BACTERIOLOGICAL AND
CHEMICAL ANALYSIS

J. Fresolone, 60 Monroe Street.	5
R Edwards, 30 Foster Street	4
Stoutenburgh Building 259 Plane Street ..	7
Thomas Waldron 74-101 Smith Street (closed, contaminated)	3
Compo-Site, Inc., 215 Astor Street	2
National Lock Washer Company, 40 Hermon Street	2
Fireside, Green Pond, N. J	2
M Weiss Company, Irvington, N. J ..	2
Total	27

One well contaminated water of which was found unfit for potable use. This well was closed up and the rest were found to be above suspicion.

SPECIAL AND MISCELLANEOUS WORK OF VARIOUS DESCRIPTIONS
PERFORMED FOR THE HEALTH OFFICER

Vaccinating smallpox contacts.

Court summons served.

Special sanitary complaints investigated

Septic tank and sewage samples for purification demonstration.

Supervised Mayor Charles P. Gillen's emergency coal distribution during coal shortage.

Supervised Camp Gillen, May 10-July 12.

SAFEGUARDING NEWARK'S SWIMMING POOLS

The growing popularity of public baths and swimming pools, which are more or less community bath tubs, is due, no doubt, to the present housing condition, with the resulting scarcity of suitable apartments or rooms. It is known that there is a considerable amount of doubling up in families in the city and district, and many have been obliged to resort to rooming houses who would otherwise have leased or rented houses or apartments had such been available.

It is a consequence of these temporary or makeshift quarters that the public bath, with its opportunity for a dip in a swimming pool, is particularly sought after.

The lack of bathing facilities has led to an increased interest in the conditions which prevail in our baths and swimming pools. It will therefore, be of interest to many citizens to know the methods of control exercised by the Department of Health over these places. There are few things more important than the provision of an adequate number of bathing places in cities.

Newark leads in this respect, not only in the number of public baths but in the character and the sanitary condition maintained by the city. Not many years ago a number of baths were closed by the Board of Health and closed as a public nuisance.

All public baths are divided into two classes; those owned and operated by the city, which are free to all and are controlled by the Board of Health, and those baths privately owned, where various types of baths are available, such as Russian and Turkish baths.

All baths in the city are, before construction, required to conform to the regulations of the Board of Health Department as well as to adhere to certain rules and regulations for their operation.

Sanitary inspection of all bathing houses is regularly made throughout the city. Samples of water for bacteriological analysis are regularly taken, and where pool water is found to be unduly high in bacteria, frequent chlormation of the pool water is insisted upon.

These precautions are necessary because of the fact that typhoid fever, venereal diseases and skin affections may be contracted in swimming pools. The presence of the colon bacillus is always a guide to indicate the presence of undue contamination. The source of infection is in all cases traced to patrons using the pools as a result of the pool water not being kept clean or from towels or swimming suits not properly disinfected. The first essential to keep pool water sanitary is to require a shower bath, with the liberal use of soap, for every person before entering a plunge pool. Not only is this a requirement in all baths where pools or plunges are in use, but a further safeguard is provided in preventing all persons from using the pool who are apparently suffering from skin diseases, ulcers, sores, or running ears. All such persons should naturally be excluded from the use of any public bath of any kind.

Although swimming pool water can be kept fairly clean by filtration and reasonably safe by bleaching powder, it is safer to exclude all possible sources of danger than to risk the safety of the unwary.

Managers of bathing establishments are given instruction in pool sanitation and in the methods of sterilization by boiling water or steaming of all towels and bathing suits after each use of same. Adherence to this practice alone will safeguard the public to a considerable degree. The following is a list of baths where swimming pools are in use, with certain information as to the equipment and the conditions governing their use by the public:

SWIMMING POOLS IN NEWARK, NEW JERSEY

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DEPARTMENT OF PUBLIC AFFAIRS

Size of Pool	16½x40 ft	16x40 ft	18x33 ft	35x60 ft	14x30 ft	7x15 ft	12x24 ft
Location	Public	Public	Public	Public	Public	Public	Public
Season	Year-round	Year-round	Year-round	Year-round	Year-round	Year-round	Year-round
Water	Chlorine	Chlorine	Chlorine	Chlorine	Chlorine	Chlorine	Chlorine
Hours	10:00 A.M. to 8:00 P.M.	10:00 A.M. to 8:00 P.M.	10:00 A.M. to 8:00 P.M.	10:00 A.M. to 8:00 P.M.	10:00 A.M. to 8:00 P.M.	10:00 A.M. to 8:00 P.M.	10:00 A.M. to 8:00 P.M.
Admission	Free	Free	Free	Free	Free	Free	Free
Locker Room	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Shower	Yes	Yes	Yes	Yes	Yes	Yes	Yes
First Aid	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Life Guards	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Swimming Instruction	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Other Features	None	None	None	None	None	None	None

ANNUAL REPORT OF DETAILED HEALTH
INSPECTORS FOR 1920

Dr. Charles V. Craster, Health Officer.

DEAR SIR—I herewith submit my report for the year 1920:

INDUSTRIAL HYGIENE BUREAU

On August 1, 1921, at your suggestion, and with the cooperation of the State Department of Labor, through their representative Mr. John Kach, Chief of the Division of Hygiene and Sanitation, a Bureau of Industrial Hygiene was established in recognition of the fact that industrial hygiene is fundamentally a health activity which should be carried on as a preventative health activity.

For the five months ending December 31, 1920, I investigated the following occupational diseases:

Lead poisoning	12 cases
Mercury poisoning	4 cases
Arsenic poisoning	2 cases

These cases had been reported to this department by hospitals and attending physicians. A history of each was sent to the State Department of Labor, as well as a copy kept on record in this office. Several other cases of mercurial and arsenical poisoning not occupational were reported to this department, which were investigated. Some of these cases were accidental others suicidal, while still others were the result of criminal intent. These cases were turned over to the proper authorities for their disposal. In every case of occupational disease investigation of the conditions under which the victim had been working was made, and it was found in most that illness was due to ignorance of the poisonous nature of the materials handled, to lack of instruction and carelessness in personal habits. The larger industrial com-

cerns who use material of a hazardous nature are only too willing to cooperate with this department, not only from a health but also from an economic standpoint, and have complied with all of the requirements of the State Department of Labor, i. e., safety devices, etc.

However, in all the plants inspected by me, particularly plants that handle lead, I have seen no warning signs posted telling their operators of the dangers of their work and the necessity of using the protective devices provided, such as gloves, masks, respirators, etc. As a rule the unskilled labor employed in these plants are foreigners, such as Russians, Poles, Spaniards, Portuguese and Italians, quite ignorant of the English language. In all fairness to these men there should be warning signs printed in their mother tongues telling them of the dangers of the work and of the necessity of carefully following instructions given.

There should be a school of instruction in all industrial plants where poisonous materials are used, handled or produced, not only for new but old employees as well. This school in the course of time would pay large dividends in both efficiency and economy, and from an economic standpoint would be a good investment.

The introduction of industrial hygiene as part of the Department of Health program to create Harris' Plan brought us to the times of many new phases of public health work which logically grow out of this work. Cooperation with employers in advising them as to methods of eliminating hazards to health and of those things which by neglect cause a lessening of output and to reduce the natural physical and mental cost of the individual worker, is a valuable method of increasing output and is capable of saving the lives and of increasing the power through the establishment of the very close cooperation with the managers of industry.

The following is a detailed list of special work carried out in 1920:

Number of visits to watersheds	5
Number of visits to Cedar Grove Reservoir.....	8
Number of visits to Belleville Reservoir.....	8

SAMPLES OF CITY WATER SUPPLY TAKEN AT THE FOLLOWING PLACES FOR BACTERIOLOGICAL AND CHEMICAL ANALYSIS

Oak Ridge Stream	5
Clinton Stream	5
Kanouse Stream	5
Echo Lake Stream	5
Macopin Intake, inside of gatehouse	5
Cedar Grove Reservoir, outside inlet gatehouse	8
Cedar Grove Reservoir, outside outlet gatehouse	8
Belleville Reservoir, inside inlet gatehouse ..	8
Belleville Reservoir, outside outlet gatehouse ..	8
Board of Health Building, faucet City Dispensary	8
Prudential Insurance Company Building	10
Number of inspections made in watersheds	38
Number of calls made in watersheds	60
Total number of samples taken	75
Number of days at watersheds	5

INSPECTIONS

Number of special inspections made ...	742
Number of inspections made with other inspectors ...	66
Number of inspections made with Health Officer .	27
Number of investigations made out of the city. ...	86
Poultry slaughter houses	227
Dance halls	20
Motion picture theatres	19
Total number of inspections....	1,187
Official calls made on health matters.....	871
Days in office for Health Officer.....	94
Hours in court.....	14½

REINSPECTIONS

Special	15.
Poultry slaughter houses	1
Dance halls	2
Motion picture theatres	3
Total number of inspections	21

POULTRY SLAUGHTER HOUSES

	Approved	Rejected
Applications for public poultry slaughter houses	1	5
Applications for private poultry slaughter houses	1	2
Number of public poultry slaughter houses in the city		12
Number of private poultry slaughter houses in the city		33

Respectfully submitted,

BENJAMIN J. CAHILL,
Detailed Inspector.

REPORT OF CHIEF SANITARY INSPECTOR

To Dr. Charles V. Craster, Health Officer

DEAR SIR: I herewith submit my annual report for the year ending December 31, 1920:

The duties of my position as Chief Sanitary Inspector are such that I am enabled to ascertain the general sanitary conditions of the entire city, and from my observations during the year I would report that the general sanitary condition of the city has been satisfactory.

The city is divided into sixteen wards, out of which we have twenty sanitary districts. Each district is covered by a trained sanitary inspector who is responsible for the sanitary conditions of his respective district. When making difficult investigations the district inspector usually consults me for advice as to the proper procedure to make a thorough inspection.

A weekly inspection was made of the common lodging houses, milk stations and city camp.

A monthly inspection was made of all public baths, parochial schools and public comfort stations.

Special duties performed are listed as follows:

Lodging houses inspected	9
Public bath houses inspected	11
Parochial schools inspected	25
City milk depots inspected	2
City camp inspected	1
Hospitals visited	26
Number of inspectors' reports verified	123
Inspections made with district inspectors....	221
Out-of-city inspections.....	5
Inspections made at night.....	17
Sunday inspections.....	9
Special inspections for Health Officer....	102
Total	551

Written reports to Health Officer	59
Verbal reports to Health Officer.....	43
Days detailed in office.....	25
Days in court	130.

Respectfully submitted,

ANDREW J. BRADY,

Chief Inspector

REPORT OF CHIEF PLUMBING INSPECTOR

To Dr Charles V. Craster, Health Officer.

DEAR SIR: I herewith hand you the report of the Plumbing Staff for 1920:

The year opened with severe winter weather, causing numerous frozen and burst water and sewer pipes, and to add to the confusion the plumbers went on strike. But despite these handicaps the plumbing of our city was kept in a fairly good condition as special efforts were made by the inspectors to have the most necessary work done.

The fact that the installation of outside water closets has been discouraged for the past few years and the location of plumbing pipes and fixtures where they would be protected from frost was of use in limiting the number of breakdowns.

SEPTIC TANKS

The plumbing inspectors conducted a survey of septic tanks which had been installed from time to time and the results of this survey strengthened our belief in the efficiency of tanks of this type. A total of sixty five have been installed to date. Of these, two have been discontinued and sewer connections have been obtained. The inspectors also found two which had been cleaned for no other reason than that someone had thought it time for cleaning. Each tank was found doing good work and the effluent was clear in each case.

Due to the industrial depression and the closing of the war industries, a large number of the tanks were not being used to any extent and some not at all, therefore it was deemed expedient to postpone the chemical analysis of the effluent until the tanks were being used somewhere near capacity. Nowhere did we find a tank overloaded, and the proportion

75. The following permits were issued for the year 1920. A special survey card was used and will be available for information at all times.

PLUMBING PERMITS

The following permits were issued for the year 1920. The number for the previous year because of the high cost of building construction. The housing shortage remained the same and few new houses have been built. The number of permits issued for the year 1920 is a larger number being enrolled than ever before, and the quality of workmanship is better than ever before.

The following is a summary of the permits for the year 1920.

	1920	1919
Plans Approved and Filed—		
New System	1,795	1,795
Additions	1,795	1,795
Plans rejected	2	1
Plumbing permits issued	1,795	1,795
Sewer permits issued	463	381
Relay sewer permits issued	94	7
Privy vault permits issued	3	1
Cesspool permits issued	5	0
Septic tank permits issued	6	0
Water tests	1,434	1,434
Sanitary tests	532	532
Plumbing tests	3,614	4,233
Sewer tests	1,230	7
Relay sewer tests	783	0
Privy vault tests	1,119	1,119
Violations served	8	3
Violations complied with	42	0
Complaints received	67	108
Notices served	0	0
Notices complied with	0	1
Law suits instituted	16	18

DEPARTMENT OF HEALTH

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	1920	1919
Law suits discontinued	6	12
Law suits pending	4	6
Fines imposed & total	\$275.00	\$225.00
Hours in court	41	51
Meetings of Examining Board	12	12
Applications for master plumber's license, examinations	76	41
Passed examination for master plumber's license	41	26
Master plumbers' licenses issued	377	331
Septic tanks installed	6	3
Septic tanks discontinued and base tank connected to sewer	2	0

Respectfully submitted

CHARLES A. HALLGRING,
Chief Plumbing Inspector.

ANNUAL REPORT

OF THE

Division of Disinfection

ANNUAL REPORT

OF THE

Division of Disinfection

To Dr. Charles V. Craster, Health Officer

DEAR SIR:—I herewith submit to you the reports of the Contagious Disease and Disinfecting Divisions for the year ending December 31, 1920.

These reports, consisting of a general table of the various reportable diseases by wards and block, a table of each disease by wards, a table of all diseases (except venereal) in age groups and a report of the activities of the Disinfecting Division, show a marked increase over 1919, due to the large number of pneumonia, measles, whooping cough and influenza cases reported during the year.

HOUSES QUARANTINED

	1920	1919
Diphtheria, including membranous croup (placarded)	1,022	1,565
Scarlet fever (placarded).....	896	820
Measles (placarded)	6,688	661
Infantile paralysis (placarded).....	20	9
Smallpox (placarded)	4	1
Epidemic meningitis (placarded)	29	42
Typhoid fever (not placarded)	62	72
German measles (not placarded).....	186	125
Whooping cough (banded)	3,259	642
Influenza (not placarded)	9,388	4,188
Total number of cases.....	21,553	8,125

DISINFECTIONS

	1920	1919
Diphtheria, including membranous croup	909	1 3/2
Scarlet fever	730	682
Other cases	947	976
Epidemic meningitis	27	36
Infantile paralysis	21	9
Smallpox	4	1
Special	279	296
Total disinfections	2 917	3 395

MISCELLANEOUS

Visits and reinspections	109,956	88,019
Offences found	161	143
Funerals supervised	85	133
Control tests	32	511
Number of rooms disinfected	9,109	10,495
Removal by warrant of persons ill with communi- cable diseases to Isolation Hospital...	18	40

Respectfully submitted,

THOMAS MULLIGAN,
Chief, Disinfecting Division.

DISINFECTING DIVISION

MONTH, 1920	NUMBER OF CASES										NUMBER OF DISINFECTIONS										MISCELLANEOUS				
	Diphtheria	Scarlet Fever	Measles	German Measles	Epidemic Parv. A.	Whooping Cough	Typhoid Fever	Epidemic Meningitis	Smallpox	Influenza	Total	Diphtheria	Scarlet Fever	Tuberculosis	Infantile Paralysis	Epidemic Meningitis	Spectra	Smallpox	Leish	Violet	No. Cases	Excluded & perished	Recovery Disinfect	Deaths	Removals by Warrant
January	129	105	364	21	0	14	3	4	0	3553	4558	105	71	35	0	4	12	0	2	12,080	11	19	67	32	0
February	94	83	799	16	0	31	3	7	0	5416	6600	88	71	38	1	1	29	0	375	11,639	1	1	884	0	4
March	95	105	1242	21	0	337	4	2	1	293	2100	101	105	89	0	1	27	1	335	14,528	22	6	1030	0	4
April	60	70	1618	24	0	332	3	1	2	16	2,227	72	108	86	0	1	3	2	30	13,591	19	12	1248	0	3
May	68	52	1081	16	0	364	3	4	1	7	406	74	48	79	0	4	45	1	354	12,657	10	8	974	0	0
June	72	69	634	21	0	314	2	1	0	0	1104	50	32	53	0	1	16	0	230	10,432	21	6	132	0	1
July	49	21	206	5	2	160	3	3	0	3	712	53	32	75	2	2	8	0	150	6,094	14	7	487	0	0
August	34	17	45	4	3	301	3	1	0	2	505	28	16	77	2	0	14	0	137	3,945	5	3	464	0	2
September	44	22	6	4	3	258	14	3	0	7	360	38	20	70	7	3	14	0	151	4,151	7	3	450	0	2
October	92	63	21	7	4	306	6	1	0	14	404	66	20	77	6	1	27	0	199	5,611	8	4	594	0	0
November	148	112	51	10	0	184	9	1	0	20	535	113	51	66	3	1	31	0	296	6,056	8	4	743	0	1
December	139	188	121	37	0	162	3	1	0	52	707	119	121	72	0	0	19	0	331	7,642	15	8	857	0	1
Total	1000	896	6638	136	90	3350	62	29	4	9338	21553	909	730	947	21	27	379	4	2917	109,956	161	51	9,009	32	18

DEPARTMENT OF HEALTH

REPORT OF DIVISION OF CONTAGIOUS DISEASES

To C. V. Craster, M. D., D. P. H., Health Officer

DEPT. SEC. 11 beg. to submit the following report of Contagious Diseases for 1920.

DISEASE CASES BY MONTHS AND WARDS

DIPHTHERIA BY WARDS, 1920

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	5	2	10	1	9	12	4	4	8	8	2	17	11	14	13	14	129
February	8	3	14	0	8	5	4	7	3	7	3	7	5	12	6	2	94
March	6	2	14	0	1	6	6	7	11	8	2	7	6	12	2	6	95
April	4	2	10	2	3	2	4	4	7	4	2	4	4	4	0	4	66
May	5	1	7	0	7	4	4	4	5	4	3	3	7	6	8	7	73
June	1	2	4	1	14	2			3			9		6	1	9	37
July	3	4	4	0	0	2	5	1	8	4	2	6	3	2	1	10	47
August	0	2	2	0	3	6			2		0	2		4	2	4	24
September	2	2	1	0	1	2	1	6	1	5	2	5	2	6	1	7	44
October	1	6	6	9	2	3			6			12		1	4	4	47
November	6	7	20	3	8	7	5	7	10	10	4	7	18	18	8	18	146
December	2	3	19	9	5	3	9	7	7	5	6	9	36	12	3	12	117
Total	44	36	111	16	61	53	36	62	61	74	29	85	54	4	39	92	806

SCARLET FEVER BY WARDS, 19

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Total
January	11	3	13	0	2	4	0	1	9	3	5	2	1	5	4	19	0	0	82
February	3	3	9	1	3	2			4	3		6		14	3	10			52
March	5	8	5	2	2	5			10	1		3	17	4	3	13			66
April	4	4	5	0	2	5			5			7		6	0	8			47
May	3	3	3	0	3	2			2			2		1	7	5			30
June	1	5	4	1	3	4			2	1	2	8	14	10	1	6			60
July	0	3	0	0	1	3			1	1	6	1		4	0	3			17
August	0	1	1	0	0	0	1	0	1	3	2	2	1	3	0	2			17
September	0	2	2	0	2	1			3			8	2	3	0	3			24
October	0	3	0	0	7	0	3	3	10	10	3	5	7	4	4	4			62
November	2	0	4	1	9	7			15	1		17	7	6	3	6			71
December	5	3	13	6	12	7	14	6	15	20	4	20	21	5	6	19			146
Total	34	38	60	11	48	40	24	17	77	61	31	68	104	83	31	97			806

TYPHOID FEVER BY WARDS, 1920

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	3
February	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
March	0	0	0	0	0	0	0	0	1	1	1	0	0	1	0	0	4
April	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	3
June	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
July	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	3
August	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
September	0	1	4	0	0	0	0	1	0	1	0	1	2	0	0	4	14
October	0	0	0	0	1	0	0	1	0	0	1	1	1	0	0	0	6
November	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
December	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	3
Total	1	0	0	0	2	1	1	1	2	1	2	1	2	1	0	4	62

MEASLES BY WARDS, 1920

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
February	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
March	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
April	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
June	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
July	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
August	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
September	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
October	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

WHOOPIING COUGH BY WARDS, 1920

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	0	3	22	0	5	18	21	10	7	7	4	4	29	21	1	19	190
February	0	5	11	1	1	6	13	8	7	6	8	3	31	30	9	30	173
March	0	11	23	8	4	3	11	13	26	2	22	35	58	43	23	20	337
April	17	6	21	2	8	7	5	4	35	16	14	9	61	38	4	61	333
May	3	2	3	4	19	15	1	6	38	25	17	18	46	30	11	20	294
June	4	4	5	3	12	25	6	18	37	20	19	29	66	28	7	31	314
July	0	16	19	5	5	29	13	24	32	9	47	37	80	22	15	72	460
August	12	4	21	1	7	40	16	16	41	30	51	45	47	23	7	46	391
September	3	2	13	4	14	14	18	23	14	38	23	19	30	16	27	11	258
October	19	5	7	5	11	5	14	19	8	14	15	16	26	23	11	1	195
November	6	5	7	2	16	12	3	19	9	21	14	20	16	16	15	4	184
December	10	9	8	0	9	14	12	22	7	15	7	9	15	9	7	9	168
Total	116	74	79	51	122	298	133	182	351	195	241	243	513	300	137	513	3,259

BRONCHIAL PNEUMONIA BY WARDS, 1920

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	34	16	18	17	19	20	21	27	17	24	19	24	29	33	16	16	351
February	51	31	43	19	37	29	29	41	43	35	30	36	52	44	24	34	598
March	16	5	16	5	1	4	9	13	10	0	1	13	6	7	8	3	164
April	8	6	13	1	9	6	10	6	14	11	2	39	15	17	5	6	143
May	11	5	5	3	9	1	2	4	8	12	2	8	6	6	2	8	86
June	6	0	3	0	11	0	1	0	4	13	4	6	18	10	6	1	76
July	7	0	4	1	5	0	2	0	2	5	0	8	1	8	0	1	44
August	1	0	0	0	8	0	0	0	0	6	1	2	0	2	0	2	16
September	3	0	6	1	3	1	2	3	4	5	1	6	2	0	4	1	42
October	8	1	2	2	0	2	0	3	4	10	1	19	1	4	1	1	56
November	10	3	3	5	5	4	0	4	3	8	1	10	0	4	2	1	61
December	14	8	20	1	9	5	4	9	1	25	6	25	19	9	6	3	149
Total	179	64	133	53	127	72	91	110	108	162	77	168	134	158	73	77	1,786

CHICKENPOX BY WARDS, 1920

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	6	5	10	5	5	10	8	16	18	11	2	24	31	17	8	13	184
February	3	0	8	1	3	4	3	7	12	11	4	1	10	2	4	8	76
March	5	3	5	1	6	16	4	5	5	1	10	3	11	7	0	6	97
April	0	3	4	1	10	14	8	9	11	7	5	5	27	18	6	5	133
May	6	3	10	2	6	10	2	11	14	7	5	0	19	11	2	5	113
June	4	1	17	2	4	1	1	22	7	5	3	0	25	18	4	5	114
July	2	0	6	4	8	1	2	2	1	0	0	4	9	5	0	3	42
August	1	0	8	0	1	1	0	0	1	2	2	1	1	8	0	1	17
September	3	0	2	2	1	0	0	2	0	0	0	0	2	0	0	0	12
October	1	0	1	0	4	3	3	5	1	9	0	1	7	1	3	3	63
November	3	1	1	1	1	18	6	10	6	3	15	1	1	6	6	3	87
December	16	11	16	1	1	17	22	8	20	3	28	4	10	8	16	20	209
Total	54	29	79	26	44	91	59	95	100	51	83	43	147	97	42	71	1,127

MUMPS BY WARDS, 1920

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	2	2	11	12	6	7	16	11	6	21	0	8	2	5	3	21	132
February	6	2	13	8	5	0	15	2	8	14	5	8	4	11	6	10	119
March	8	7	10	7	5	5	2	5	2	0	6	11	13	15	6	14	124
April	1	3	3	3	1	2	4	2	18	8	2	4	8	12	7	5	63
May	5	5	17	5	9	6	3	6	11	11	4	14	6	12	4	8	125
June	3	2	11	1	9	0	1	10	10	6	1	9	4	14	4	0	89
July	1	1	4	0	4	3	0	5	4	0	1	0	0	4	0	3	20
August	3	0	1	0	1	1	1	0	0	0	0	0	2	1	2	0	12
September	1	0	1	1	0	4	1	1	0	0	8	1	0	1	0	0	14
October	0	0	0	0	1	0	0	0	0	2	0	0	1	2	2	2	11
November	0	1	7	0	1	2	2	2	2	0	0	2	2	2	0	2	25
December	1	1	9	0	1	0	3	0	7	2	0	2	1	2	1	2	32
Total	3	26	87	37	43	35	48	44	7	71	22	60	44	81	33	68	800

	MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Total
JANUARY		0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	2
FEBRUARY		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MARCH		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APRIL		1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
MAY		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
JUNE		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
JULY		0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
AUGUST		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SEPTEMBER		4	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	6
OCTOBER		1	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	4
NOVEMBER		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
DECEMBER		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL		6	1	1	2	2	3	0	0	0	2	0	0	1	1	1	0	0	22

PUERPERAL SEPTICÆMIA BY WARDS, 1900

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3
February	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
March	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
April	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
June	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
July	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
August	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
September	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
October	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	3
December	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	0	0	0	0	0	2	2	0	2	0	1	0	0	10

MALARIA BY WARDS, 1900

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
February	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
March	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
April	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
June	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
July	1	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	4
August	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
September	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
October	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
December	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	1	1	0	1	1	1	1	0	1	2	1	0	0	0	10

ERYSIPHAS BY WARDS, 1900

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	2	0	3	2	0	1	2	1	3	0	5	2	6	0	1	1	29
February	1	0	4	1	0	2	0	0	0	0	0	0	0	2	1	0	10
March	0	5	8	1	3	1	1	0	2	1	0	2	5	2	0	1	33
April	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
May	2	2	2	1	1	2	0	2	0	2	2	1	2	1	0	1	21
June	4	0	4	1	0	0	0	0	0	0	0	0	1	4	0	1	19
July	0	0	1	0	1	1	0	2	0	1	0	1	2	2	0	0	11
August	0	0	1	0	2	0	1	0	1	0	0	0	0	1	0	0	8
September	0	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	3
October	0	3	1	2	0	4	1	1	1	0	0	3	0	1	0	1	20
November	1	0	0	0	1	1	2	0	0	0	0	5	0	1	2	1	14
December	1	0	3	1	0	1	0	2	3	4	0	0	1	2	0	2	24
Total	13	16	30	13	5	16	8	12	14	11	14	17	21	18	5	10	232

INFLUENZA BY WARDS, 1920

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
January	208	14	38	98	179	193	177	303	326	156	168	117	446	334	149	3,598
February	131	15	5	1	2	3	17	1	16	29	153	143	89	63	19	485
March	52	10	37	10	12	18	10	6	18	16	3	9	31	20	11	206
April	1	0	4	1	0	0	1	8	0	6	8	0	0	1	0	26
May	0	1	0	0	0	0	0	0	0	0	5	0	1	0	0	7
June	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
July	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
August	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
September	0	0	1	0	0	2	0	1	1	1	0	1	0	0	0	7
October	0	0	1	0	0	1	0	0	1	1	2	2	2	0	4	14
November	1	0	2	0	0	2	0	2	2	0	0	2	2	2	2	20
December	3	2	6	0	0	1	0	0	8	2	2	6	4	0	4	44
Total	368	31	107	112	193	206	188	326	344	168	173	117	446	334	149	3,598

TUBERCULOSIS BY WARDS, 1920

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total	
January	17	18	24	30	14	12	12	10	8	6	13	10	9	22	6	9	211
February	6	11	10	12	2	11	10	10	6	10	7	14	4	6	6	6	106
March	14	17	18	8	7	10	12	5	12	6	8	5	13	16	7	5	168
April	14	9	12	7	13	13	6	8	8	7	4	9	5	23	4	7	149
May	7	7	8	5	9	10	2	4	6	5	6	10	18	18	6	5	126
June	18	8	14	8	16	6	11	11	5	6	8	6	8	19	8	5	157
July	18	8	22	4	16	5	7	4	9	4	12	10	11	14	4	7	166
August	7	5	11	10	6	4	11	8	4	6	8	6	4	15	4	9	113
September	12	10	20	8	8	6	17	3	8	9	5	8	10	7	5	9	143
October	11	18	14	8	10	7	7	5	5	5	2	6	6	12	6	4	126
November	12	15	9	10	7	7	1	7	6	6	4	26	7	10	2	4	123
December	12	15	9	10	7	7	1	7	6	6	4	26	7	10	2	4	123
Total	153	139	184	107	129	96	111	83	85	81	81	99	114	176	62	86	1,786

OPHTHALMIA NEONATORUM BY WARDS, 1920

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
January								6	0	0	0	0	0	0	0	6
February								0	0	0	0	0	0	0	0	0
March							0	0	0	0	0	0	0	0	0	0
April							1	0	0	0	0	0	0	0	0	1
May							0	0	0	1	0	0	0	0	0	1
June							0	0	0	0	0	0	0	0	0	0
July							0	0	0	0	0	0	0	0	0	0
August							0	0	0	0	0	0	0	0	0	0
September							0	0	0	0	0	0	0	0	0	0
October							0	0	0	0	0	0	0	0	0	0
November							0	0	0	0	0	0	0	0	0	0
December							0	0	0	0	0	0	0	0	0	0
Total							1	0	0	0	2	0	0	0	0	3

EPILEPSY BY WARDS 1920

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
February	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
March	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	3
April	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	3
May	0	1	0	0	1	0	0	0	0	0	1	0	0	0	0	0	3
June	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
July	0	0	1	0	1	0	0	2	0	0	0	0	0	0	0	0	4
August	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
September	0	0	0	0	0	0	1	1	0	0	1	1	0	0	0	0	7
October	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	2
Total	1	1	3	0	2	2	1	4	1	1	2	1	2	1	1	1	27

INFANTILE PARALYSIS BY WARDS 1920

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
February	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
March	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
April	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
June	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
July	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2
August	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
September	1	0	0	1	1	0	0	0	0	0	1	0	3	0	0	0	6
October	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	4
November	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2
December	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	3	1	0	1	1	0	0	1	1	1	1	1	3	0	1	0	20

LEAD POISONING BY WARDS 1920

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
February	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2
March	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
April	1	0	1	2	1	0	0	0	1	0	0	0	1	0	0	0	6
May	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
June	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3
July	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
August	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
September	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
October	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3
November	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	4	2	1	3	2	1	1	0	1	0	0	1	3	0	0	2	24

DYSENTERY BY WARDS, 1920

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
February	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
March	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
April	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
June	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
July	0	0	0	0	0	1	5	7	1	0	0	0	0	1	2	0	11
August	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	3
September	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
October	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	1	0	0	1	6	7	1	0	1	1	0	2	2	0	17

CHANCROID BY WARDS, 1920

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2
February	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2
March	0	2	0	1	1	0	1	0	0	0	0	0	1	2	1	0	9
April	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
May	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1
June	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	2
July	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	3
August	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	3
September	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
October	1	1	2	0	0	0	0	0	0	0	0	0	0	1	0	0	5
November	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	4
December	0	1	2	0	0	1	0	0	0	0	0	0	0	0	0	0	6
Total	3	6	6	6	3	1	2	0	0	1	3	0	1	5	2	0	38

GONORRHOEA BY WARDS, 1920

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	7	13	13	7	5	7	5	4	4	3	2	2	4	3	3	2	84
February	3	14	5	7	1	1	4	2	1	4	2	0	2	4	5	4	59
March	3	20	9	8	3	1	4	5	9	4	1	4	5	4	2	1	84
April	3	4	3	6	6	0	0	4	4	3	1	3	3	4	6	2	54
May	3	15	5	3	1	2	2	0	3	1	1	1	1	4	1	2	45
June	4	9	7	5	4	0	2	0	2	3	0	3	2	5	3	3	51
July	6	12	14	20	7	4	7	6	1	3	1	1	12	2	3	100	
August	3	10	8	10	3	3	1	4	3	2	1	2	4	5	7	1	62
September	3	16	8	3	1	2	1	3	2	1	1	4	3	2	2	4	58
October	4	19	6	7	7	5	3	1	10	0	3	1	4	4	2	2	73
November	3	11	8	4	4	4	1	2	0	5	2	1	1	6	5	6	62
December	2	7	14	12	6	1	7	7	4	2	0	4	3	4	4	3	80
Total	44	150	95	92	50	29	34	39	48	29	17	26	33	57	41	38	817

SYPHILIS BY WARDS, 1920

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
JANUARY	3	14	4	8	4	3	4	1	5	0	0	0	1	4	1	0	52
FEBRUARY	3	11	4	8	2	2	2	2	4	1	4	2	1	0	0	1	47
MARCH	8	8	7	2	6	4	3	3	6	1	0	3	2	2	1	2	58
APRIL	4	4	1	1	2	0	2	0	3	1	2	0	1	3	3	2	38
MAY	6	11	6	2	2	0	2	0	5	3	1	1	4	2	2	4	51
JUNE	4	1	4	3	1	1	4	4	6	5	1	3	5	6	2	3	67
JULY	8	7	8	1	4	0	1	1	7	2	0	1	4	6	4	6	64
AUGUST	2	6	5	0	0	0	2	0	1	1	0	1	3	2	1	0	26
SEPTEMBER	3	10	1	3	3	2	4	0	3	0	1	1	2	6	6	0	42
OCTOBER	4	10	2	4	2	2	3	8	7	0	1	2	2	0	2	2	51
NOVEMBER	2	14	3	5	0	3	3	1	3	0	0	1	3	3	3	1	46
DECEMBER	2	1	5	5	2	3	4	2	5	2	6	0	2	8	6	6	69
TOTAL	42	115	53	49	28	20	35	22	56	16	16	16	29	68	60	60	691

WARD DISTRIBUTION OF DISEASES REPORTED IN 1920

[illegible]

Respectfully submitted,

EDWARD J. WOLF, M.D., Superintendent of Integrency Diseases

ANNUAL REPORT

OF THE

Food and Drug Division

ANNUAL REPORT

OF THE

Food and Drug Division

Charles V. Craster, M. D., Health Officer.

DEAR SIR. I herewith submit to you the report of the Food and Drug Division for the year ending December 31, 1920:

DAIRIES

Dairies inspected (not scored).....	300
Dairies reinspected (not scored).....	124
Dairies rescored	209

It is necessary for inspectors of this department to check up cows on every inspection made of each dairy delivering milk in the City of Newark, owing to the requirements of our ordinance that all cows producing milk to be sold as Grade "A" Raw must be tuberculin tested annually, and all new cows added to a herd must be retested after two months of previous test

Cows checked up during the year 1920	4,638
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Out of 3,214 cows tuberculin tested, 137 were reactors, or 4.26 per cent.

TABLE OF MILK EXAMINATIONS

Sealed chemical samples taken	1,869
Sealed chemical samples below legal standard	28
Bacterial samples taken of milk	2,780
Bacterial samples within required amount	1,717
Preliminary samples taken and analyzed by this division	1,585
Preliminary samples within required amount	1,367
Sediment tests taken at creameries	2,168
Sediment tests taken at Food and Drug Laboratory	2,920
Cream samples taken and analyzed by this division.....	346
Cream samples below the legal standard	34

Total number of milk and cream samples	11,808
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Of the 2,920 bacterial samples of milk taken, 65 samples were found to contain streptococci and pus. It is the custom of this department, where streptococci and pus are found in a sample of milk, to immediately notify the dairyman to employ the services of a veterinarian to go over his herd of cattle to locate the cows with infected udders. These cows are then to be isolated until free from infection, and their milk not used for human consumption. On rare occasions have we ever found streptococci and pus in a second sample of milk taken from said infected cows.

MILK LICENSES

Wagon licenses issued	317
Store licenses issued	1,318
Wagon licenses	\$ 642.25
Store licenses	2,644.25
	<hr/>
	\$3,286.50

On June 2, 1920, this department started issuing cream licenses to storekeepers and wholesale milk dealers.

CREAM LICENSES

Wagon licenses issued	6
Store licenses issued ..	410
Wagon licenses ..	\$ 4.50
Store licenses ..	200.50
	<hr/>
	\$205.00

PENALTIES PAID FOR SAMPLES OF MILK AND CREAM
BELOW THE LEGAL STANDARD ANALYZED
BY THIS DEPARTMENT

Milk samples ..	\$290.00
Cream samples ..	375.00
	<hr/>
	\$665.00

Of the 2,198 sediment samples of milk taken at the twelve creameries (total inspections, 43) who supply Newark 1,445 samples of milk were clean, 562 samples were fairly clean, 125 samples were dirty, 25 samples were very dirty and 41 samples were filthy.

According to our milk ordinance, amount of bacteria allowed per cubic centimeter for each grade of milk is as follows:

"A" Raw	100,000
"A" Pasteurized	30,000
"B" Pasteurized	50,000
Certified	10,000

We list as follows: Bacterial samples taken from each of our milk dealers during the year 1920, the bacterial samples above the required amount, average count for the year, chemical samples taken, average fats and total solids

DEALERS SELLING CERTIFIED MILK

DEALER	PRODUCER	Bacterial Samples Taken for Year	Bacterial Samples Above Standard	Average Bacterial Count for Year	Chemical Samples	Fats	Total Solids
Woodbrook Farms ..	Own	13	3	20,727	7	3.40	11.97

GRADE "A" RAW MILK

Borden Farm Pro. Co.	Earlville N. Y.	19	0	8,712	9	3.70	12.41
Fairfield Dairy Co.	Own	25	0	18,440	13	3.70	12.71
See g. Emis	N. Drake	2	0	77,500	2	3.60	12.20
Seas Abraham	Own	23	2	68,227	11	3.85	12.33
Sonnitog Bros.	Own	24	0	38,150	11	3.46	11.89
Chapman Bros.	F. Holtz	25	1	41,080	13	3.52	11.83
N. de Bros.	Own	8	0	41,210	4	3.60	12.3
Spreen Fred	Dosler	4	0	41,750	2	3.31	11.85
Batke Adolph	Own	1	0	43,181	6	3.40	12.48
Mabus Bernard	Own	24	1	45,000	12	3.30	11.88
Goldberg, Harry	Own	30	6	58,100	15	3.90	13.61
Krueger, Emil	Own	28	4	56,864	15	3.60	13.11
Dolan, Patrick	Own	28	4	56,351	17	3.40	12.5
Fee Samae	Own	22	4	67,727	10	3.60	11.92
Hecht, Joseph	H. Weinberg	5	1	66,000	3	3.40	12.51
Knorr, Philip	red Krueger	8	1	68,175	5	3.50	12.29
Eckert, Julius	Own	7	4	70,321	11	4.00	12.76
Sullivan, James	Own	7	1	72,875	4	3.40	11.70

GRADE "A" RAW MILK *Continued*

DEALER	PRODUCER	Bacterial Samples Taken for Year	Bacterial Samples Above Standard	Average Bacterial Count for Year	Chemical Samples	Total Sold
Young, Edward	Own	27	3	74,500	14	11.9
Schmidt, L. F.	Own	20	3	75,500	12	11.9
Hoffman, Dewey	Own	4	4	76,100	4	8.5
Heide, John	Own	2	6	82,000	2	9.0
Baer, Emanuel	Own	23	5	84,000	11	8.8
Chubbuck, Wm.	Own	9	1	85,500	4	6.0
Bohnsky, L.	L. Bohnsky	2	2	88,000	1	12.0
Bohnsky, L.	Bohnsky	4	4	88,000	2	7.0
Bohnsky, L.	Bohnsky	6	6	91,000	3	11.0
Bohnsky, L.	Bohnsky	8	3	91,000	3	11.0
Bohnsky, L.	Bohnsky	12	6	91,000	4	8.5
Bohnsky, L.	Bohnsky	6	6	91,000	1	8.5
Bohnsky, L.	Bohnsky	7	7	91,000	4	8.5
Bohnsky, L.	Bohnsky	8	8	91,000	2	8.5
Bohnsky, L.	Bohnsky	7	7	91,000	1	8.5
Bohnsky, L.	Bohnsky	7	7	91,000	12	8.5
Bohnsky, L.	Bohnsky	8	8	91,000	1	8.5
Bohnsky, L.	Bohnsky	5	5	91,000	3	8.5
Bohnsky, L.	Bohnsky	7	7	91,000	8	1.0
Bohnsky, L.	Bohnsky	3	3	91,000	3	1.0
Bohnsky, L.	Bohnsky	4	4	91,000	1	1.0
Bohnsky, L.	Bohnsky	6	6	91,000	4	2.0
Bohnsky, L.	Bohnsky	3	3	91,000	4	2.0
Bohnsky, L.	Bohnsky	9	9	91,000	8	2.0
Bohnsky, L.	Bohnsky	8	8	91,000	4	2.0
Bohnsky, L.	Bohnsky	3	3	91,000	4	2.0
Bohnsky, L.	Bohnsky	10	10	91,000	18	2.0
Bohnsky, L.	Bohnsky	22	7	91,000	3	8.5
Bohnsky, L.	Bohnsky	24	8	91,000	1	17.0
Bohnsky, L.	Bohnsky	24	3	91,000	12	1.0
Bohnsky, L.	Bohnsky	8	8	91,000	1	17.0
Bohnsky, L.	Bohnsky	16	5	91,000	7	17.0
Bohnsky, L.	Bohnsky	7	7	91,000	8	11.0
Bohnsky, L.	Bohnsky	9	9	91,000	1	2.0
Farrington, James	Own	3	3	91,000	4	3.0
Phisher, Adam	Own	20	7	91,000	1	12.0
Phisher, Adam	Own	18	2	91,000	10	2.0
Phisher, Adam	Own	28	4	91,000	5	2.0
Phisher, Adam	Own	24	8	91,000	5	2.0
Phisher, Adam	Own	24	5	91,000	5	2.0
Hoffman, Walter	L. Bohnsky	28	4	91,000	6	8.5
Stoepel, William	M. Levine	25	1	91,000	2	2.0
Howe, Ryerson	V. Zimersky	12	6	91,000	8	2.0

GRADE "A" RAW MILK -Continued

DEALER	PRODUCER	Bacterial Samples Taken for Year	Bacterial Samples Above Standard	Average Bacterial Count for Year	Chemical Samples	Fats	Proteins
Becker, Herman	Own	15	6	240,666	7	3.70	11.76
Fischer, Arthur	G. Kuback	22	10	258,409	12	3.20	12.12
Fischer, S.	"	12	4	285,416	6	3.10	11.18
Fischer, Fred	"	24	9	321,875	13	3.30	11.71
Kelly, H. J.	"	24	7	342,500	9	3.60	12.21
Kelly, Alex.	"	16	8	358,000	7	3.30	11.77
Connelly, J. J.	"	25	11	370,200	12	3.40	12.34
Connelly, J. J.	"	3	2	374,330	5	3.50	11.96
Kelly, H. J.	"	24	10	373,583	11	3.10	11.46
Malone, J. H.	"	28	14	393,357	14	3.70	12.27
Connelly, Wm.	"	16	9	403,312	8	3.30	11.80
Connelly, Fred	"	20	12	404,000	11	3.30	11.90
Moore, Philip	"	29	5	406,551	15	3.30	12.07
McGowan, T. J.	"	4	4	487,500	2	3.20	11.69
McGowan, Chris.	"	12	6	522,500	6	3.50	12.11
Spencer, Nathan	"	8	5	842,500	4	3.60	11.97
Spencer, Fred	"	8	6	1,188,150	3	3.70	11.08

"A" PASTEURIZED

Kear & Fishbein	M. J. Jansen	8	1	8,375	5	3.40	11.93
Borden Farm Pro. Co.	Brusden, N. Y.	23	3	17,521	13	3.50	12.01
Borden Farm Pro. Co.	Oriskany, N. Y.	16	3	23,187	8	3.60	12.31
Vandermere Farms	"	4	2	27,000	2	3.60	11.94
Borgher, Frank	"	24	6	28,000	17	3.50	12.11
Proctor, Wm. Inc.	"	24	8	46,583	12	3.30	11.63
Proctor Dairy Co.	"	24	11	56,300	11	3.70	12.13
Amherst Dairy Co.	Own	28	11	57,000	11	3.70	12.17
Lickerman, Louis	Model Dairy Co.	18	3	57,166	10	3.24	11.60
Seelig Bros.	C. G. Stretch	24	15	235,708	11	3.60	11.99

"B" PASTEURIZED

Borden Farm Pro. Co.	Brusden, N. Y.	6	0	5,000	3	3.80	11.84
Perry, Fred	George Robinson	8	0	8,750	2	3.60	11.95
Borden Farm Pro. Co.	S. Mantrise, Pa.	3	0	18,000	2	3.80	12.50
Lickerman, Louis	Model Dairy Co.	18	3	26,000	10	3.40	11.76
Binger, Fred	C. Hyndman	23	5	29,130	11	3.20	11.54
Borgher, Frank	George Clark	24	4	31,208	12	3.20	11.71
Proctor, Gus	C. W. Vanatta	12	3	32,583	6	3.90	11.69
Stah, George	George Robinson	10	3	42,900	6	3.60	11.93
Aldeney Dairy Co.	Own	23	6	61,695	10	3.50	12.04
Max, Abraham	Jersey M. and C. Co.	25	7	61,208	1	3.60	12.22
Borden Farm Pro. Co.	Branchville, N. J.	22	9	65,545	9	3.40	11.88

"B" PASTEURIZED—Continued

DEALER	PRODUCER	Rail & Supt Tons for Year	Rail & Supt Abn. Standard	Avg. B. per Cent for Year	Chemical Supt	Total Sold
Porter, Wm. Pro. Co.	W. C. Wyckoff	20	5	70,750	9	50
Borts, William	E. C. Wyckoff	24	3	73,291	13	350
Provost, Wm. Inc.	Own	25	9	73,520	14	318
Newark Milk Co.	George Robinson	24	7	82,166	13	350
Lebowitz, Max	C. W. Vanatta	24	13	82,250	11	346
Lebowitz, Max	C. W. Vanatta	14	2	85,592	7	346
Friend, William	C. W. Vanatta	23	10	89,200	13	340
Bauer, Chris	Interstate M. & C. Co.	9	12	91,271	16	356
Wien, Frap.	A. Vanatta	8	1	103,750	5	345
Kar & Lebowitz	Mod. D. & C.	15	6	104,331	10	356
Pasnowitz, Harry	C. W. Vanatta	6	2	109,000	4	360
Hofacher, Charles	C. W. Vanatta	25	8	128,920	13	360
Zimmerman, Robert	George Robinson	24	8	130,708	13	360
Fischman, William	George Robinson	22	8	131,045	11	353
Hensel, Larry	W. Vanatta	17	7	133,411	8	350
Nathan, John	Sei. Bros.	28	18	137,142	15	347
Lebowitz, Sam	Own	20	5	139,100	7	360
Lebowitz, Larry	George Robinson	25	11	139,600	12	320
W. & Lebowitz	George Robinson	17	4	142,666	6	346
Lebowitz, Co.	Own	27	11	156,333	14	350
Lebowitz, Warren	Lebowitz, M. & C. Co.	24	12	169,250	13	353
Lebowitz, John	C. W. Vanatta	25	9	173,720	13	350
Lebowitz, George	E. C. Wyckoff	24	7	177,417	13	355
Weissmiller, Chas.	George Robinson	26	13	179,421	13	350
Funison, John R.	E. C. Wyckoff	20	7	183,300	9	350
Schroeder, Ernst	Farmers' Exchange	17	17	202,708	11	330
Lebowitz, George	Sei. Bros.	23	13	219,695	13	343
Lebowitz, M. & C. Co.	Own	12	7	255,833	8	350
Lebowitz, Abraham	C. W. Vanatta	4	1	263,750	3	350
Lebowitz, M.	Wyckoff	21	9	263,781	9	350
Lebowitz, Jacob	Farmers' Exchange	6	9	320,687	8	340
Lebowitz, Ben	Own	8	5	322,500	4	353
Lebowitz, David	C. W. Vanatta	1	2	361,250	2	350
Lebowitz, Abraham	Sei. Bros.	20	19	340,652	12	350
Lebowitz, George	Farmers' Exchange	12	12	366,833	11	350
Lebowitz, Abraham	Lebowitz, M. & C. Co.	22	14	380,927	15	340
Lebowitz, C. P.	Sei. Bros.	28	24	402,607	12	340
Lebowitz, Chris	Sei. Bros.	25	14	472,880	11	350
Lebowitz, Ben	Sei. Bros.	24	19	552,425	24	340
Farnes, Barney	Sei. Bros.	16	11	748,750	6	333

FOOD SUPERVISION

The following is a list of the activities under this head:

VISITS MADE TO PLACES WHERE FOOD WAS PREPARED
AND SOLD FOR THE PURPOSE OF ENFORCING THE
STATE LAW AND SECTIONS OF THE SANITARY
CODE CONCERNING FOOD

Delicatessen stores	35
Drug stores	20
Centre Market	420
Butcher shops	823
Restaurants inspected	334
Restaurants reinspected	1,002
Bakeries inspected	295
Bakeries reinspected	943
Cheese plants inspected.....	6
Soda water plants inspected	61
Soda water plants reinspected	147
Ice cream plants inspected	27
Ice cream plants reinspected	81
Wholesale groceries	14
Pretzel bakeries	3
Dairy stores	53
Food exposures	544
Complaints investigated	268
Complaints verified	264
Samples of washing water taken from soda fountains in con- fectionery stores	111
Samples of ferri chloride taken with State Inspector.....	5
Confectionery stores inspected.....	138
Confectionery stores reinspected	557
Grocery stores inspected	433
Grocery stores reinspected	972
Food and drug samples taken	132
Sealed milk samples taken with State Inspector	76
Notices served (form notices).....	1,300
Notices sent to creameries to be distributed to dairymen about the cooling of milk.....	2,320

PLACES FOUND TO BE OK AFTER INSPECTIONS MADE
AND NOTICES SERVED

Food exposures ...	244
Delicatessens ...	35
Restaurants ...	203
Grocery stores ...	50
Butcher shops ...	120
Confectionery stores ...	73
Dairy stores ...	10
Drug stores ...	5
Bakeries ...	52
Soda water plants ...	25
Ice cream plants ...	17
Total ...	834

COURT CASES

Cases turned in for suit ...	106
Cases discontinued ...	32
No summons issued ...	5
Cases fined ...	5
Cases dismissed by the Mayor ...	64

RECORD OF THOSE APPEARING AT FOOD AND DRUG
HEARINGS FOR VIOLATIONS

Food exposure violators appeared....	126
Grocers, bakers, druggists, butchers and restaurant proprietors appeared regarding violations of State Sanitary Act and the Sanitary Code ...	143
Number of milk dealers appeared at hearings for milk violations ...	211
Number of milk dealers notified to appear at hearings for milk violations, but failed to appear.....	39
Milk dealers who had licenses revoked to sell milk on account of violations of milk ordinance (all rescinded) ...	9
Total number appeared at meetings.....	480

SAMPLES TAKEN

Butter samples ...	10
Sour and sweet cream samples.....	450
Citrate magnesia samples.....	3
Cider vinegar samples ...	2
Ice cream samples (for bacteria, to be used for adoption of ice cream ordinance) ...	24

Bread samples	6
Buttermilk samples	7
Sardine samples	10
Restaurant approval certificates granted	334
Inspections of stores for milk licenses	1 318

The following condemnations were made.

FOODS, OTHER THAN MEAT

101 crates lettuce	12 crates cabbage
2 crates leeks	168 crates artichoke
7 crates cauliflower	266 crates grapes
182 crates peaches	106 lbs brown sugar
1 lb chocolate nutted moguls	131 lbs white sugar
70 lbs cheese	85 lbs. Italian chestnuts
1 lb figs	21,577 lbs. potatoes
5 bags chestnuts	24½ dozen eggs
3 boxes Faber beans	10 quart bottles milk
51 crates asparagus	

MEAT, POULTRY AND SEA FOOD

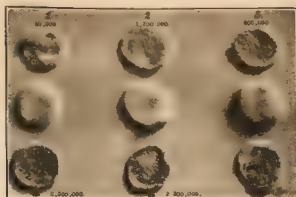
18,511 lbs. weak fish	410 lbs meat
953 lbs fowl	90 lbs. beef
269 lbs ham fat	2 chickens
15 lbs ham	3 lbs. pork chops
181 lbs neck bones	

FREE DISTRIBUTION OF MILK

Starting in January our milk inspectors, instead of taking a sample of milk from the bottle at the dealer's wagon which we presume on various occasions caused contamination by exposing the pipette to the elements purchased the whole bottle of milk and took samples from same in our laboratory.

After samples are taken from these bottles a large amount of milk remained on hand, which was put in containers (one quart size) and distributed to the needy (this being recommended by the district nurses of this department) for the fee of 3 cents per quart. This is the charge for the container only.

The entire twelve months of 1920 this department distributed on an average of 180 quarts per month.



THE SEDIMENT TEST

A pint of milk has been strained through each of the above discs of cotton.

The results show the original amount of dirt present on each disc as compared with the center control. The numbers under the discs are the amounts of bacteria found per c.c. in each milk sample.

Note how the bacterial count increases as the discs show more dirt.

Dirt and bacteria get into the milk from unclean handling, from dust, manure, hair and feed.

Bacteria cause tuberculosis, septic sore throat, dysentery, etc.

The sediment test shows up the methods of the careless milk producer.

A clean milk producer does not require to filter his milk. He relies upon washing the cows' flanks and udders, in dry milking using small-mouthed pails, in having his utensils thoroughly cleaned and sterilized, before using in immediate cooling

of the milk below 50 degrees Fahrenheit and keeping it there until delivered to the consumer.

PRETZEL BRILL

During the entire year of 1920 this department made raids at various times on minors exposing pretzels, candy (unwrapped), etc., on the streets, offering the same for sale to the public.

Of the 93 vendors taken to the Juvenile Court, if the vendors were first offenders a penalty of \$1 was imposed upon the parent of each minor, but if it happened to be the second or more offense, the parent of each offender had to pay a fine of from \$2 to \$5, according to the circumstances of the case. In all cases the pretzels were destroyed. This work is still being continued with good results.

This department started examining food handlers in restaurants under authority of the State Sanitary Code on August 10, 1920, to determine if they have tuberculosis, venereal diseases or any contagious disease. In large department stores, or private concerns where they have a clinic of their own, with physicians in attendance daily, we granted permission that they do their own examining. All food handlers are compelled to be examined every six months. From August 10 (first examination day) to December 31, 1920, the report of the food handlers examined is as follows:

Number examined in this department	2,314
Number examined by private concerns and department stores ..	434
	2,748
Number citizens	1,791
Number suspects of tuberculosis	439
Number positive of tuberculosis	25
Number not vaccinated	149
Number positive of a venereal disease	10
Number skin eruptions	42
Number Wasserman tests taken	42

Number persons notified to appear to be examined	34
Number females examined	14
Number males examined	14
Number certificates granted	32

Of the 25 positive cases of tuberculosis found among all the food handlers examined these people were sent a notice to discontinue their services in the different eating places where they were employed. A day or so after the person was in receipt of the notice sent, an inspector from this department would visit the restaurant to interview the proprietor and the person to see that the notice was complied with. In all cases this was done. This also applies to the 10 positive venereal cases.

Of the 149 persons found not vaccinated, at least 135 were vaccinated in this department. The balance of 14 were vaccinated by their family physician. No certificate was issued until this work was done.

The 42 persons found to have a skin eruption were all granted certificates from this department because the eruption was not dangerous to health.

Respectfully submitted,

S. G. SHARWELL,
Chief Food and Drug Inspector.

BUREAU OF VETERINARY MEAT INSPECTION

—

*To Charles I. Craster, Health Officer, Department of
Health, Newark, N. J.*

DEAR SIR: I hereby submit the report for the year 1926.

Since the reorganization of this division under the name "Veterinary Bureau of Meat Inspection," as suggested by you, we have been able to do good work and meet with gratifying results, as shown by the tabulated report below.

As soon as the newly introduced Ordinance, "An Ordinance prohibiting the sale and exposure to sale of meat in the City of Newark before inspection" is passed and the necessary assistance for the proper enforcement of same is given, the meat inspection in the City of Newark will be greatly improved. With the addition to this of a municipal abattoir where all the killing of animals for human consumption is to be done, the meat inspection could be made perfect.

Commission, cold storage and slaughter houses and Centre

Market inspected daily.

Cattle stamped	2,655
Retail butcher shops inspected	4,639
Beef carcasses examined	43,761
Calf carcasses examined	73,600
Sheep carcasses examined	199,375
Hog carcasses examined	99,981
Pounds of beef inspected.....	181,065
Pounds of poultry inspected	5,746,506
Pounds of fish inspected.	828,394
Pounds of pork inspected.....	2,523,046
Pounds of miscellaneous meats inspected ..	230,110
Complaints investigated	28

Condemned: 48 carcasses, 682 parts of carcasses, 450 par-
rabats, 3 boxes of calves' liver, 4,059 pounds beef, 442
pounds lamb, 244 pounds veal, 20 pounds turkey, 100 pounds

fish, 949 pounds chicken, 4,277½ pounds miscellaneous meat, 26,940 pounds pork, 36 pounds bolognas, 700 pounds liver, 10 pounds neck bones, 3 forequarters, 180 boxes of ox tails

Only a few cases of communicable diseases have been reported during the year, and are as follows

Glanders	2
Pharyngitis	6

Respectfully submitted,

WERNER RUNGE,
Veterinarian

ANNUAL REPORT

OF THE

Chemist



ANNUAL REPORT

OF THE

Chemist

Dr. Charles V. Craster, Health Officer.

DEAR SIR: I herewith submit my annual report for the year ending December 31, 1920:

The general character of the work in this department has been the same as heretofore. The total amount has been about equal to that of last year, but recent economic conditions have made laboratory operation more difficult.

As in recent years, the statistical data have been much condensed and partly omitted.

MILK

On account of the establishment of a municipal dairy milk laboratory at the department building where sediment and fat tests were made by the inspectors, only sealed and special samples of milk were submitted to me for analysis. There were 1,865 sealed samples of milk analyzed during the year, as follows:

Total number of sealed milk samples	1,865
Total number above standard of 11.50% total solids	1,837
Total number below standard of 11.50% total solids	28

COMPARISONS

	1917	1918	1919	1920
Number of samples analyzed.....	1,413	2,093	2,175	1,865
Per cent. of samples below standard	8.99	3.96	2.94	1.50
Average per cent. of total solids	12.27	12.20	12.26	12.34
Average per cent. of fat.....	3.63	3.61	3.56	3.53

The above table clearly shows that the general quality of the milk has improved, not only in the average per cent. of total solids, but in the reduced number of samples below the standard, which is lower than at any previous time, as shown by our records.

In addition to the regular routine milk examinations, there were about one hundred special samples analyzed for various purposes. Many of these were from the city milk stations.

Of fifty-two samples of cream examined, twenty-seven were found below the standard of 16 per cent. of fat. Practically all of the samples falling under the standard were only one or two per cent. below, thus indicating errors in adjustment rather than wilful adulteration.

FOREIGN FATS IN CREAM.

The development of the homogenizing principle in emulsifying fats has made possible and practical the admixture of foreign fats and oils with butter fat in the manufacture of cream and ice cream. Whether or not this should be permitted there can be no question about the proper labeling of such products. They should at least be sold as what they are. Thirty-five examinations of fat from cream were specially made to determine the presence of foreign fat but all appeared to be genuine.

SACCHARIN

Since saccharin is not capable of solution in high alcohol, it is in general determined by four samples of soda water examined, nineteen contained this artificial sweetener.

MISCELLANEOUS

Examinations of various substances for various purposes were made. Some were very simple and others complicated and time consuming. They included soap, ice cream, herbs, cider, olive oil, candy, lard, jelly, argyrol, butter, cake, ham, cotton seed oil, canned goods and well water; also a sample

of talc for arsenic which was suspected to have caused poisoning. None was found.

CITY WATER

The good quality of Newark water is well and widely known. Other departments make regular bacteriological and microscopic examinations, both of which confirm the opinion formed by the chemical analysis.

Tables of analysis similar to those published in recent reports are included for comparison:

ANALYSES OF NEWARK AQUEDUCT WATER

Sample from Old Rock Steam Locomotive and Union Stream at Newark, N. J.

Parts per Million

Month	Tem-		Color	NITROGEN AS				Chlorine	Tempo- rarity Hardness	Total Solids	Loss on Ignition	Fixed Mineral Matter
	perature, Fahrenheit	Turbidity		Free	Albuminoid	NH ₃	NI					
				Ammonia	Ammonia	trites	trates					
January	34	1.0	40	0.26	.108	0	.10	3.0	27	67	25	41
February	34	1.0	40	0.22	.108	0	.10	3.0	27	67	25	41
March	33	.5	25	.022	.070	*	.10	2.5	13	49	19	30
April	34	1.0	40	0.22	.108	0	.10	3.0	27	67	25	41
May	45	1.0	40	0.24	.108	0	.085	3.0	24	62	16	46
June	64	.5	20	.024	.094	0	.06	3.0	26	50	27	23
July	64	1.0	20	.030	.078	*	.09	3.0	26	73	15	58
August	64	1.0	30	.014	.094	0	.095	3.0	25	57	20	37
September	63	1.0	30	.014	.094	0	.095	3.0	25	68	28	40
October	52	1.0	30	.014	.094	0	0	2.4	23	50	18	32
November	52	1.0	30	.014	.094	0	0	2.4	23	50	18	32
December	52	1.0	30	.014	.094	0	0	2.5	23	53	17	34

* Trace

ANALYSES OF NEWARK AQUEDUCT WATER

Samples from Clinton Stream before junction with Oak Ridge Stream at Newtoanland

Parts per Million

1920	Tem- perature, Tur- Degrees, bidity Fahr.	Color	NITROGEN AS				Chlo- rine	Tem- pera- ture Fahr.	Total Solids	Loss on Ignition	Fixed Matter	
			Free Ammonia	Albuminoid Ammonia	Ni- trates	Ni- trates						
January	34	2	35	.074	.80	0	.000	1.0	11	30	11	25
February												
March	32	1.0	30	.032	.146	*	.107	1.3	14	33	21	32
April												
May	45	5	25	.030	.092		.011	3.0	14	50	39	30
June	64	.5	20	.020	.074	0	.000	1.5	10	81	11	30
July	74	1.0	0	.016	.066	0	.005	2.0	11	65	3	27
August	64	.5	20	.010	.008	0	.000	2.5	11	34	19	15
September	62	1.0	25	.014	.070	0	.005	3.0	24	47	22	25
October	57	.5	25	.008	.006	0	.030	2.5	25	52	17	35
November	57	.5	20	.012	.070	0	.020	3.0	11	40	12	38
December	37	.5	18	.030	.070	0	.070	2.0	10	34	15	19

* Trace.

ANALYSES OF NEWARK AQUEDUCT WATER

Samples from Laboratory Faucet, 927 Broad Street

Parts per Million

Month	Temp. Degrees Fahr.	pH	NITROGEN AS				Calc. Hardness	Total Solids	Loss on Ignition	Fixed Mineral Matter
			Calc.	Free	Ammoniacal	Nitrites				
January	37	7.5	0.4		0.76	0	125	9.3	23	38
February	38	7.6	0.4		0.8	0	107.5	3.0	20	47
March	41	7.7	0.35		0.6	0	110	3.0	15	47
April	44	7.8	0.35		0.4	0	96.0	2.5	17	50
May	51	8.0	0.35		0.74	0	99	3	19	53
June	67	8.2	0.35		0.86	0	95.5	3.0	21	45
July	71	8.3	0.35		0.8	0	100	2.5	21	42
August	74	8.4	0.30		0.8	0	96	2.5	22	49
September	67	8.5	0.3		0.84	0	98.5	1.0	20	56
October	66	8.6	0.3		0.8	0	97.0	1.5	20	56
November	55	8.5	0.25	.012	.082	0	.040	2.5	20	50
December	45	8.4	0.25	.016	.070	0	.070	2	16	47

* Trace.

ANALYSES OF NEWARK AQUEDUCT WATER

Averages of Monthly Examinations

Parts per Million

NO. OF SAMPLE	TEMP.		NITROGEN AS						AMMONIA		TOTAL Solids	LOSS ON Drying	Fixed Matter
	per cent	Degrees Fahr	Total	Free	Ammonia	Nitrate	Nitrite	Total	Free				
Oak Ridge Stream	51	7	20.5	0.4	0.70	*	0.81	0.8	20.5	5.7	20.4	38.3	
Clinton Stream	53	.65	23.8	.0196	.0032	0	.005	2.5	14.9	41.2	16.6	28.6	
Kearnsville Stream	5	5	43.0	0.87	.0030	0	.03	0.00	16.0	47.1	21.8	27.3	
Echo Lake Stream	53	.55	48.0	.0224	.1158	0	.091	2.7	15.8	57.2	35.5	32.4	
Macopin Intake	54	.66	31.1	.0211	.0090	0	.085	2.04	20.6	56.7	2.7	34.0	
Cedar Grove Intake	54	1	28.1	0	.05	0	.0404	1.83	10.0	2.8	20.0	20.8	
Cedar Grove Outlet	53	54	20.5	.0196	.0003	0	.040	3.77	10.7	53.0	23.1	31.8	
Beavertown Reservoir	54	54	2.8	0.80	.0516	0	.055	1.77	10.2	11.0	20.1	22.8	
Interbury Reservoir	52	50	12.5	0.90	.0786	0	.088	3.23	8.0	53.1	22.1	30.0	

* Trace.

TABLE OF MAXIMUM, MINIMUM AND AVERAGE TOTAL
SOLIDS IN THE WATER FROM THE LABORATORY
FAUCET FROM 1900 TO DATE

(Total Solids, Grains per U. S. Gallon)

Year	Maximum	Minimum	Average
1900	2.06	1.96	2.53
1901	3.00	1.93	2.68
1902	2.92	1.98	2.45
1903	2.92	1.69	2.32
1904	2.92	2.04	2.52
1905	2.92	1.60	2.33
1906	3.24	2.44	2.71
1907	3.09	2.35	2.60
1908	2.92	2.22	2.66
1909	3.37	2.23	2.78
1910	3.50	2.16	2.81
1911	3.91	2.63	3.06
1912	3.32	1.92	2.94
1913	3.91	2.16	3.04
1914	3.49	2.27	2.88
1915	3.90	1.92	2.99
1916	3.55	2.56	2.98
1917	3.84	2.39	3.11
1918	4.19	1.40	3.02
1919	3.78	2.74	3.32
1920	3.44	2.62	3.05

Respectfully submitted,

HERBERT B. BALDWIN,
Chemist.

ANNUAL REPORT

OF THE

Division of Bacteriology

ANNUAL REPORT
OF THE
Division of Bacteriology

Charles V. Craster, M. D., Health Officer.

DEAR SIR:—Herewith is respectfully submitted the report of the Division of Bacteriology for the year ending December 31, 1920:

In reviewing the activities of this division for the past year one of the first subjects to attract attention is the investigation commenced August 11, 1920, by the Food and Drug Division of the physical condition of food handlers, including all persons who handle raw or cooked food which is offered for sale in the city.

For each person examined a throat culture was taken to eliminate diphtheria infection, and a sample of blood was obtained for the Widal test in order to exclude typhoid infection. These cultures and blood samples were brought to the laboratory for examination, and during the year 2,769 cultures and a like number of blood specimens of this character were tested.

The results of these examinations present the surprising gratifying information that practically all of these persons failed to show any demonstrable evidence of infection either with diphtheria bacilli in their throats or agglutinating bodies in their blood. It is true that a few persons out of this number showed some suspicious bacilli in their throat cultures, but all of these proved on further investigation to be free from virulent bacilli. Two persons showed the presence

of agglutinating bodies in their blood. One of these disappeared before subsequent samples could be obtained, and the other had only a very low agglutinating titre. Investigations of bowel and kidney discharges in this case proved negative.

DIPHTHERIA IN 1920

During the year there were reported in Newark 1,022 cases of this disease, as compared with 1,565 cases for the previous year (1919). This reduction in the number of cases serves to illustrate the manner in which communicable diseases vary from year to year, and notwithstanding the fact that activity in culture taking from exposed persons kept up, the number of cases of diphtheria discovered by culture or reported clinically was 543 less in 1920 than in the previous year.

DIPHTHERIA ANTITOXIN

The benefits of diphtheria antitoxin treatment are strikingly shown in the records for the year 1920 and for the two preceding years:

	1920	1919	1918
Total number of cases of diphtheria	1,022	1,565	975
Total mortality, irrespective of treatment	62= 6.0%	50= 3.1%	79= 8.1%
Number of cases treated with antitoxin	956	1,486	929
Number of deaths (treated with antitoxin)	47= 4.9%	36= 2.4%	72= 7.7%
Number of cases not treated with antitoxin	66	79	46
Number of deaths (not treated with antitoxin) ..	15=22.7%	14=17.6%	7=15.4%

TUBERCULOSIS

The laboratory records for 1920 show that 2,685 samples of sputum were examined, and in only 462, or 17 per cent, of the specimens were tubercle bacilli found. This indicates

that the decrease in specimens of tuberculous sputum received at the Laboratory continues. This decrease began in 1918 and has continued during each succeeding year. Whether this indicates a decrease in the incidence of tuberculosis or otherwise, the fact remains that in spite of increased population and increase in the number of samples of sputum examined during the last three years, a decrease in the actual number, as well as in the percentage of positive specimens of tuberculous sputum examined at the Laboratory has persisted. This is illustrated in the following report prepared by Dr. F. H. Ripley from the Laboratory records for 1920:

To R. N. Connolly, M. D., Bacteriologist.

DEAR SIR:—The number of specimens of sputa examined for the year 1920 was the largest since the Laboratory was established in 1895 with the exception of the year 1916 when a large number of re-examinations were made for the New York City Tuberculosis Sanatorium at Verona, N. J. While the total number of specimens was the largest recorded, the number containing tubercle bacilli was the smallest on record at the Laboratory. Four hundred sixty-two (462) specimens contained tubercle bacilli and two thousand two hundred twenty-three (2,223) were negative, making a total of 2,685 specimens examined. This also shows the smallest percentage of specimens containing tubercle bacilli being but 17 per cent.

The following table shows the percentage of specimens containing tubercle bacilli for the past thirteen years:

Year	Cases Containing Tubercle Bacilli	Cases Containing Tubercle Bacilli	Total Cases	Percentage of Cases Containing Tubercle Bacilli
1908	727	1,380	2,107	34%
1909	858	1,663	2,521	34%
1910	771	1,746	2,517	30%
1911	686	1,649	2,335	29%
1912	797	1,820	2,617	30%
1913	720	1,900	2,629	27%

Year	No. of Cases Containing Tubercle Bacilli	No. of Cases Not Containing Tubercle Bacilli	Total Cases	Percentage of Cases Containing Tubercle Bacilli
1914	617	1,797	2,414	25½%
1915	580	2,416	3,396	29%
1916*	*1,219	2,765	3,984	30½%
1917	737	2,403	3,140	23%
1918	543	2,070	2,613	20%
1919	522	2,023	2,545	20½%
1920	462	2,223	2,685	17%

* In the year 1916 many re-examinations of the same cases were made for the Newark City Tuberculosis Sanatorium at Verona, N. J. which accounts for the greater number of positive cases in that year.

The present-day method of treatment for tuberculosis and the follow-up system instituted by the Department of Health in preventing those suffering with the disease from giving it to others is no doubt making itself felt and in no small measure is undoubtedly responsible for the good results shown by the figures.

Respectfully submitted,

DR. THOMAS H. RIPLEY,
Assistant Bacteriologist

CITY WATER SUPPLY (PEQUANNOCK)

The table showing the average number of bacteria in the city water during 1920 shows that the water maintained its reputation for purity. The sampling points were as follows:

Origin of Sample—	No. of Examinations	Average No. of Bacteria per c c
Oak Ridge Stream, above Clinton Stream	16	222
Clinton Stream, above Oak Ridge Stream	16	119
Kanouse Creek, above Pequannock Creek	16	124
Echo Lake Stream, above Pequannock River	16	128
Macopin Intake, at Gatehouse	16	145
Cedar Grove Reservoir, Inlet Gatehouse	19	101
Cedar Grove Reservoir, Outlet Gatehouse	19	83
Belleville Reservoir, Inlet Gatehouse	19	81
Belleville Reservoir, Outlet Gatehouse	19	61
Department of Health, Plane and William Sts	18	41
Laboratory Faucet, City Hospital	41	28

It is surprising how close the samples obtained from the city fountains grade each other year after year, as may be seen by the following comparison:

Year		No. of Examinations	Average No of Bacteria per c. c.
1918	Dept. of Health, Plane and William Sts. .	24	33
1919	Dept. of Health, Plane and William Sts. .	23	31
1920	Dept. of Health, Plane and William Sts. .	18	41
1918	Laboratory Faucet, City Hospital.	45	27
1919	Laboratory Faucet, City Hospital.	44	29
1920	Laboratory Faucet, City Hospital.	41	28

MISCELLANEOUS EXAMINATIONS

Samples of water from wading pools in the public parks and samples from the public and semi-public swimming pools, as well as samples of wash water from the tanks used for washing glasses, spoons, etc., at soda-water counters, have been examined and the results enabled the department to exercise some supervision over these places and make helpful suggestions. The results have been published in the monthly bulletin during the year.

Numerous samples of various kinds of food, canned and smoked, have been examined for health bacillus during the year. None of the samples examined in 1920 showed the presence of this bacillus.

PERTUSSIS VACCINE

There has been a marked demand for this vaccine during the year and while it is very difficult to form a positive opinion regarding its value, yet as its use becomes more general it receives more frequent reports of a favorable nature. It would seem in view of the difficulty of proving the value of the vaccine by experimental methods that the department continues to supply it to physicians. It has realized, nevertheless, that its value is due to the action of physicians and their patients in a more lasting form than its regulations were made compelling its use.

CITY MILK SUPPLY

The milk supply has been extensively investigated during the year and some interesting information and deductions have been gathered from the Laboratory records by Dr. G. Ward Disbrow in the following report:

To R. N. Connolly, M. D., Bacteriologist.

DEAR SIR: I herewith submit a report giving the results of work done on milk, wash water from soda fountains, soft drinks and oysters during the year 1920:

MILK

City Supply. This comprises the milk supplied the people of Newark by the various dealers. Two thousand eight hundred ninety-three samples were examined, of which 13 were Certified Milk, 1,598 Grade A Raw Milk, 251 Grade A Pasteurized and 1,031 Grade B Pasteurized.

Under the provisions of the city milk ordinance, Certified Milk must not contain more than 10,000 bacteria per c. c., A Raw Milk, not more than 100,000, A Pasteurized, not more than 30,000 and B Pasteurized, not more than 50,000. Applying these figures, the following table is obtained showing the number of samples of each group examined, together with the percentage of samples acceptable and unacceptable under the ordinance:

GRADE	ACCEPTABLE SAMPLES		UNACCEPTABLE SAMPLES	
	Number	Per Cent.	Number	Per Cent.
Certified	4	30.76	9	69.23
A Raw	1,180	73.84	418	26.05
A Pasteurized	164	65.33	87	34.66
B Pasteurized	566	54.89	465	45.10
	1,914		979	

City Hospital Supply. The City Hospital was supplied with milk from six different sources. The accompanying table gives the results of this series of examinations. All samples were Grade B Pasteurized except in the case of source W-2. In this case the milk supplied was Grade A Raw

SOURCES	Number of Samples Examined	ACCEPTABLE SAMPLES		UNACCEPTABLE SAMPLES		Average Count Bacteria per c. c.
		Number	Per Cent	Number	Per Cent	
B1	207	88	42.51	119	57.48	258,502
D	218	122	55.96	96	45.03	169,913
W1	196	168	85.71	28	14.28	68,892
B2	356	71	19.94	285	80.05	241,621
F	40	10	25.00	30	75.00	169,250
W2	11	0	00.00	11	100.00	500,000
--	--	--	--	--	--	--
	1,028	459	44.64	569	55.35	

Of the 1,028 samples examined, only 459, or 44.64 per cent, came within the provisions of the ordinance, and none of the sources furnished a milk that averaged the 50,000 bacteria per c. c. required. The only source that nearly approached the standard was W1, but even this average was nearly 19,000 higher.

Municipal Milk Depots.—Seventy-nine (79) samples were examined from the Municipal Milk Depots. Of these, 63, or 79.74 per cent, came within the ordinance requirements. The following table gives the results of this series:

DEPOT	Number of Samples Examined	ACCEPTABLE SAMPLES		UNACCEPTABLE SAMPLES		Average Count Bacteria per c. c.
		Number	Per Cent	Number	Per Cent	
Ridge St.	17	13	76.47	4	23.52	42,647
Seventh Ave.	14	10	71.50	4	28.50	48,285
Charlton St.	24	18	75.00	6	25.00	49,458
Ferry St.	24	22	91.66	2	8.34	43,583
--	--	--	--	--	--	--
	79	63	79.74	16	20.26	

All of the samples from the Milk Depots were Grade B Pasteurized, and it will be noted that the average count per sample for each station was less than 50,000.

Streptococci.—An examination for streptococci was made on each sample plated for bacterial content. There were, therefore, made during the year 4,000 such examinations. The following table shows how these examinations were divided and the number and percentage of streptococci found:

SOURCE	Number of Samples Examined	Number of Samples Containing Streptococci	Per Cent Containing Streptococci
City Supply	2,893	73	2.52
City Hospital ..	1,028	38	3.69
Municipal Depots	79	20	25.31
	4,000	131	3.27+

MISCELLANEOUS EXAMINATIONS

Complaint samples	11
Buttermilk	2
Bottles for sterilizing....	2
Milk for tubercle bacilli	15
Samples from Pasteurizing plants.....	61
Special examinations for streptococci.....	314
	405

WASH WATER FROM SODA FOUNTAINS

Samples of the water used for rinsing glasses at various soda fountains throughout the city were examined during the year.

In all 94 samples were examined for bacterial content and fermentation according to the usual technic for water examinations. Twenty one of the samples gave fermentation in one half c c amounts in both lactose bile and glucose broth. The bacteria counts grouped themselves as in the following table:

Bacteria per c c	Number	Per Cent
1-100	5	5.31
101-1,000	11	11.70
1,000-10,000	35	37.23
10,000-50,000	16	17.02
50,000-100,000 ..	5	5.31
100,000-1,000,000	19	20.21
Over 1,000,000	3	3.19

94

Inasmuch as we have no standard of purity for such wash water no comparisons can be drawn from these results, but it is gratifying to note that 67 of the 94 samples (71.27 + %) showed counts of less than 50,000 per c c.

SOFT DRINKS

There were examined for bacterial content 14 samples of soft drinks as sold in the "open front" soda fountains. The results obtained are as follows:

	Bacteria per c. c.
Vanilla soda	18,000
Strawberry soda	2,000
Strawberry soda	1,900
Strawberry soda	100
Lemon soda	100
Orangeade	100
Orangeade	7,000
Orangeade	37,000
Orangeade	100
Orangeade	1,000
Lemonade	100
Lemonade	100
Lemonade	100
Root beer	220,500

OYSTERS

Only one batch of oysters was examined. These gave a bacteria count of 2,500 per c. c. with fermentation in 1 c. c. amounts in lactose peptone bile.

SUMMARY

Milk Examinations, City Supply	2,893
Milk Examinations, City Supply (Streptococci)	2,893
Milk Examinations, City Hospital	1,078
Milk Examinations, City Hospital (Streptococci)	1,028
Milk Examinations, Milk Depots	79
Milk Examinations, Milk Depots (Streptococci)	79
Milk Examinations, Miscellaneous	405
Wash Water from Soda Fountains	94
Soft Drinks	14

Total Examinations, 1920 8,513

Respectfully submitted,

G. WARD DISBROW, M. D.,
Assistant Bacteriologist.

A synopsis of the routine work of the Bacteriological Division for 1920 is presented in the following table, with comparative figures for the previous year:

	Total for 1920	1919
Diphtheria -		
Cultures for diagnosis	10,712	13,127
True cases	680	1,099
Cultures for diagnosis and disinfection	12,679	16,297
Diphtheria Antitoxin—		
Doses produced during year.....	3,486	4,399
Doses distributed during year.....	3,510	4,296
Tuberculosis		
Specimens of sputum, etc., examined	2,685	2,545
Specimens containing tubercle bacilli	462	5
Typhoid -		
Blood examinations for typhoid (Widal)	3,147	3,884
Blood examinations for typhoid positive	61	
Malaria		
Blood examinations for malaria	31	
Blood examinations for malaria positive	2	
Milk Supply		
Milk examinations, general city supply	4,405	41,888
Water Supply -		
Water examinations, Pequannock supply.	216	27
Water examinations, wells, cisterns, etc.	36	
Venereal Diseases -		
Specific catarrhal examinations.	2,315	3,153
Specific catarrhal examinations positive	335	
Rabies—		
Brain tissue of animals examined	19	—
Number of positive cases found in animals	4	3
Preventive treatment to exposed persons.	4	4
Vaccines, Etc.—		
Typhoid vaccine, doses distributed.	158	18
Pertussis vaccine, doses distributed	1,221	105
Meningococcus serum, doses distributed	53	105

	Total for 1920	Total for 1919
Water from Pools and Tanks—		
Swimming pools	43	
Wading pools	3	
Soda water fountain wash tanks	94	

Very respectfully,

R. N. CONNOLLY, M. D.,
Bacteriologist.

CULTURE COLLECTORS

Following is a summary of the work performed by the two culture collectors attached to the Bacteriological Laboratory, whose duty it is to supply the culture stations with antitoxin and outfits for taking diphtheria cultures, sputums, Wassermanns, typhoid and other blood tests, collect daily all such outfits used and left at the stations by the doctors and delivered to the laboratory, with figures for 1918, 1919 and 1920:

	1920	1919	1918
Antitoxin delivered	3,163	3,815	2,600
Outfits Delivered—			
Cultures	12,309	13,997	9,599
Sputums	4,271	3,980	3,771
Typhoid	1,133	1,185	925
Wassermanns	5,341	5,374	3,494
Catarrhal	2,933	3,366	1,179
Outfits Collected—			
Cultures	8,835	11,554	4,063
Sputums	2,880	2,548	2,391
Typhoid	687	397	419
Wassermanns	3,935	3,261	2,107
Catarrhal	1,986	2,331	867

ANTITOXIN AND CULTURE STATIONS BY WARDS

Ward	STATION	Street and Number	Telephone No.
First	A. R. Baugh	Seventh Avenue and Sheffield Street	1430 B. B.
First	W. R. Schuder	95 Bellevue Avenue	1142 B. B.
First	Second Precinct Police	Summer and Seventh Avenues	5400 Market
Second	St. Michael's Hospital	Central Avenue and High Street	7610 Market
Second	City Dispensary	Plum and William Streets	8550 Market
Second	C. Holzhauser	Broad and Market Streets	1312 Market
Second	E. F. Fielding	925 Broad Street	914 Mulberry
Second	G. Schreiber	449 Broad Street	2742 B. B.
Second	First Precinct Police	Court and Washington Streets	5400 Market
Third	St. Barbara Hospital	681 High Street	6616 Market
Third	Beth Israel Hospital	High and Kinney Streets	7766 Market
Fourth	Firmen's Pharmacy	Broad and Market Streets	5116 Market
Fourth	Max Lawitt	Broad and Fulton Streets	7196 Market
Fifth	I. M. Greenfield	201 Walnut Street	3908 Market
Fifth	Eckert's Pharmacy	167 Ferry Street	202 Market
Fifth	Seidler's Drug Co.	21 Ferry Street	1764 Market
Sixth	J. P. Smith	315 South Orange Avenue	1514 Mulberry
Sixth	L. L. Staehle	169 South Orange Avenue	1539 Market
Sixth	City Hospital	116 Fairmount Avenue	9300 Market
Seventh	L. McEvoy	62 Springfield Avenue	4633 Market
Seventh	P. J. Corrigan	25 Wallace Place	3205 Market
Eighth	Elwood Pharmacy	190 Washington Avenue	1091 B. B.
Eighth	Oriental Pharmacy	289 Belleville Avenue	453 B. B.
Eighth	H. J. Quinn	187 Bloomfield Avenue	369 B. B.
Eighth	L. Arnold	684 Mt. Prospect Avenue	4134 B. B.
Eighth	Eighth Precinct Police	Washington Avenue	5460 Market
Eighth	A. Bara	346 Bloomfield Avenue	2942 B. B.
Ninth	David Bergman	175 Elizabeth Avenue	2472 Waverly

Ward	STATION	Street and Number	Telephone No
Ninth	Geo. Linnett & Bro.	77 Lincoln Park	3034 Mulberry
Ninth	R M Laird	191 Clinton Avenue	1337 Waverly
Tenth	East Side Pharmacy.	Adams and Warwick Streets	8125 Market
Eleventh	J B Foster.	Orange Street and Roseville Avenue	151 B B
Eleventh	Fifth Precinct Police	Orange and Sixth Streets	5400 Market
Twelfth	O Scholz	131 Wilson Avenue	479 Market
Twelfth	Bowers Pharmacy	28 Fleming Avenue	5267 Market
Twelfth	Third Precinct Police	Van Buren Street	5400 Market
Thirteenth	A Marciner	1041 South Orange Avenue	2878 Mulberry
Thirteenth	A Rursch	661 Springfield Avenue	3444 Waverly
Thirteenth	Seventh Precinct Police	South Orange Avenue	5400 Market
Fourteenth	F L Feind...	76 Belmont Avenue	2494 Waverly
Fourteenth	Aug Koelble	362 Springfield Avenue	2523 Bigelow
Fourteenth	Fourth Precinct Police	Seventeenth Avenue	5400 Market
Fourteenth	C Wensch	494 Springfield Avenue	2484 Waverly
Fourteenth	Seigel	129 Sixteenth Avenue	3127 Waverly
Fifteenth	E Broch	398 Central Avenue	3301 Market
Fifteenth	F Hagen	Central Avenue and Fifth Street	1651 B B
Sixteenth	I Jung	531 Clinton Avenue	2468 Waverly
Sixteenth	G I Keller	191 Avon Avenue	1103 Waverly
Sixteenth	W J Witt	821 Clinton Avenue	2871 Waverly
Sixteenth	Sixth Precinct Police	Hunterdon and Bigelow Streets	5400 Market

CULTURE COLLECTORS

John F. Dunn 113 South Eighth Street
 William J. Foyle 142 Hudson Street

ANNUAL REPORT
OF THE
City Dispensary

CLINICS

MEDICAL—Daily, 9 A. M.

DISEASES OF CHILDREN—Daily, 10 A. M.

SCROFULA—Daily, 9 A. M.

GENITO URINARY—Monday and Thursday, 10 A. M.

DISEASES OF WOMEN—Tuesday, 3 P. M.

CYSTOSCOPIC—Wednesday, 10 A. M.

DISEASES OF SKIN—Tuesday and Friday, 9 A. M.

DISEASES OF RECTUM—Tuesday and Friday, 10 A. M.

SYPHILIS, MALE—Wednesday, 3 P. M.

SYPHILIS, FEMALE—Friday, 9 A. M.

EYE, EAR, NOSE AND THROAT—Monday and Friday, 3 P. M.

NERVOUS DISEASES—Friday, 2 P. M.

OPHTHALMIC—Tuesday, Thursday and Saturday, 9 A. M.

DENTAL—Monday, Wednesday and Friday, 1 P. M.

PRENATAL—Thursday, 3 P. M.

TUBERCULOSIS—

Monday—Children, new cases, 3 P. M.

Tuesday—Adults, 3 P. M., treatment and examination, old and new cases. Children, old cases, 3 P. M. Adults, colored, 10 A. M.

Wednesday—Adults and children, throat, 3 P. M. Adults and children, colored, old and new cases, 3 P. M.

Thursday—Children, old and new cases, 3 P. M. Night clinic, adults, 6 P. M.

Friday—Adults, colored, 10 A. M. Adults, 3 P. M., treatment and examination, old and new cases.

Saturday—Children, colored, 10 A. M.

MISSION TO SANITORIUMS—Verona, Monday, 10 A. M.,
Scho. Thursday, 10 A. M., Glen Gardner, Wednesday, 10 A. M.

CITY DISPENSARY MEDICAL STAFF

DEPARTMENT OF MEDICINE

FREDERICK C. HORSFORD, M. D., *Chief of Clinic**Assistants*

G. B. EMORY, M. D.	FRANCIS C. WEBER, M. D.
C. S. JANIFER, M. D.	JOHN M. PANNULLO, M. D.
FREDERICK A. ALIING, M. D.	WALTER E. MERRILL, M. D.

PEDIATRIC DEPARTMENT

JULIUS LEVY, M. D., *Chief of Clinic**Assistants*

PAUL H. HOSP, M. D.	ARTHUR ELLIS, M. D.
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DEPARTMENT OF SURGERY

DAVID M. KRAKER, M. D., *Chief of Clinic**Assistants*

HARRY J. GILBERT, M. D.	J. W. GARDAM, M. D.
WILLIAM J. RUNYAN, M. D.	

GENITO URINARY AND CYSTOSCOPIC DEPARTMENT

C. R. O'CROWLEY, M. D., *Director*H. C. POVEY, M. D., *Chief of Clinic**Assistants*

S. C. KELLER, M. D.	WILLIAM G. NASH, M. D.
T. A. ROBERTS, M. D.	PAUL MENK, M. D.
S. ROTHENBERG, M. D.	ARTHUR WYKER, M. D.

DEPARTMENT OF GYNECOLOGY

WILLIAM GAUCH, M. D., *Chief of Clinic**Assistants*

MARY E. BROADNAX, M. D. A. J. GORDON, M. D.

DEPARTMENT OF SKIN INCLUDING SYPHILIS

DAVID A. H. J. F. WALLHAUSER, M. D., *Chief of Clinic*
 DAVID B. LOUIS A. KOCH, M. D., *Chief of Clinic*

Assistants

JOHN T. INNES, M. D. MARY E. BROADNAX, M. D.
 NATHAN L. HEILES, M. D. ERNEST KAUFMAN, M. D.
 J. S. BENNETT, M. D. FRANCES McCauley, M. D.
 ANDREW WALLHAUSER, M. D.

DEPARTMENT OF RECTAL DISEASES

DAVID A. KRAKER, M. D., *Chief of Clinic*

DEPARTMENT OF EYE, EAR, NOSE AND THROAT

E. A. CURTIS, M. D., *Chief of Clinic*

DEPARTMENT OF NERVOUS DISEASES

CHRISTOPHER C. BELING, M. D., *Chief of Clinic**Assistants*

JULIUS SOBIN, M. D. AMBROSE DOWD, M. D.
 WILLIAM RUMAGE, M. D. FRANCIS M. SHOCKLEY, M. D.

DENTAL DEPARTMENT

LEO J. McMANUS, D. D. S. J. E. H. GUTHRIE, D. D. S.

DEPARTMENT OF ORTHOPEDIC SURGERY

CARL R. KEPLER, M. D., *Chief of Clinic*

DEPARTMENT OF PUBLIC AFFAIRS

PRENATAL DEPARTMENT

H. C. H. HEROLD, M. D., *Chief of Clinic**Assistant*

A. J. GORDON, M. D.

DEPARTMENT OF TUBERCULOSIS

M. J. FINE, M. D., *Chief of Clinic**Assistants*

IRVING WILLNER, M. D.

ROSCOE BUCKNER, M. D.

WILLIAM GREEN, M. D.

JULIUS SOBIN, M. D.

ANNUAL REPORT

OF THE

City Dispensary

Charles F. Craster, M. D., Health Officer, Department of Health, Newark, N. J.

DEAR SIR — I herewith submit my annual report of the City Dispensary for the year ending December 31, 1920

The attendance at the Dispensary this year has shown some decided increases in mostly all the clinics when compared with former years, especially in the Syphilis Clinic, Clinic for Genito-Urinary Disorders and the Tuberculosis Clinic

The work of the clinic physicians has been very efficient throughout the entire year and we feel they deserve a great deal of credit for their volunteer work given so faithfully

Much activity has been performed by the Bureau of Venereal Diseases, which shows up in the large attendance at those clinics this year and in the increased number of individual visits made to the patients' homes by the social investigators under the direction of the bureau.

We are indebted to the State Department of Health for furnishing all the Neo-Salvarsan used at the Dispensary. This would mean considerable expense to the city were we compelled to purchase it ourselves.

During the past three years we have set before us the task of making the service to the sick poor conform to the standards of the twentieth century. Results have been secured which, according to the best medical opinion we can obtain, justify us in looking back with satisfaction upon the progress made this year.

Respectfully yours,

HENRY A. OLTMAN,
Apothecary, City Dispensary, Newark, N. J.

TOTAL ATTENDANCE AT CITY DISPENSARY BY MONTHS AND DISEASES TREATED

CLINICS	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Drugs		4	5	8		7	9	27	27	38	34	41	236
Medical	75		296	312		72	96	88	263	289	334	302	3,667
Surgical	17	10	461	470		148	98	95	36	140	385	430	1,074
Sk.			183	161			97	18	121	143	161	170	1,298
Sk.	27		408	390		108	174	450	334	238	569	419	3,319
Ch. Dr.	10	5	153	171	13		90	131	13	114	173	136	1,759
Gynecology	40		75	52	64	7	50	8	47	51	66	62	711
Gen. Disp.			474	428			10	474	49	442	336	297	4,798
Eye, Ear, Nose and Throat	7	68	191	135	7	138	59	2	74	90	124	169	1,288
Neurological	87	11	123	141		10	14	106	18	49	136	133	1,586
Tuberculosis	291	53	414	237	74	43	53	389	384	749	481	624	3,519
Dental	37	27	64	53	66	64	67	50	78	55	81	69	749
Orthopedic	83	5	131	163	18	16	14	30	105	133	164	166	1,676
Rectal	6	1		4			16	17	1		13	18	101
Vaccinations	61	8	48	73			1		67	88	96	8	7,263
Total treated	2,663	288	2,677	2,974	234	231	267	876	2,213	3,127	2,010	3,360	35,498
Clinic Prescriptions	2,807	2,284	3,392	5,166	1,841	146	8	1,114	1,664	1,117	3,500	364	29,847

PATIENTS SENT TO CITY HOSPITAL BY PERMITS ISSUED FROM DISPENSARY FOR CITY
HOSPITAL AND CITY BEDS MAINTAINED BY OTHER HOSPITALS

HOSPITALS	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
City Hospital	43	50	46	49	37	80	38	44	45	40	35	50	52
St. Michael's	9	10	8	6	6	5	6	1	4	3	7	5	6
St. James'	8	12	10	8	5	3	4	3	4	3	6	4	7
St. Barnabas'	10	4	5	6	4	7		3	6	6	3	6	5
Newark Memorial	11	6	6	2	10	5	2	4	3	6	5	5	6
Beth Israel	8	1	5	8	7	4	4	1	3	3	3	5	2
Women's and Children's	3	2		2		1	1		5	3	2	3	2
Babies'	9	9	8	11	14	7	10	9	3	10	4	8	10
Eye and Ear Infirmary	7	4	6	19	19	13	23	1	16	14	18	16	16
Home for Crippled Children	1	5	1			1	1	1					1
Eighth Avenue Day Nursery	1						1		1		1		4
Newark Maternity	2	2		1	4	3	1		1	1	2	0	2
Total	112	114	90	112	136	88	91	67	91	86	86	104	1,147

RECAPITULATION

Total number of patients treated	35,498
Total number prescriptions dispensed	41,096
Total number patients sent to hospitals	1,147
Total number vaccinated	1,263

ANNUAL REPORT OF THE DISTRICT PHYSICIANS FOR 1920

The following chart shows the number of visits made by the District Physicians during the year, and the nature of the various ailments treated. The city is divided into six districts, with one physician on call at all times for calls to indigent patients residing in their particular district. These physicians visit the patients, prescribe for them, prescriptions filled free at the City Dispensary, and if necessary see that the patient is placed in the proper hospital. They also assist the Contagious Disease Bureau with diagnostic work when the emergency arises.

DISEASES TREATED BY DISTRICT PHYSICIANS FOR 1920

CAUSE OF ILLNESS	1st District	2nd District	3rd District	4th District	5th District	6th District	Totals
Chickenpox	15	2	16		2		35
Measles	30	32	56	108	58	18	302
Diphtheria	5	15		11	2	5	39
Croup		4			104	1	109
Scarlet Fever	2	3			3	4	12
Dartorial Diseases				74	74		98
Whooping Cough	8	43	33	21	48	17	170
Phthisis				8	11	11	30
Truppe	12		24				36
Influenza	1	21	9		85		116
Mumps	1		1				2
Miscellaneous Zymotics	7	10	60	9	74	90	250
Cancer and Tumor	7		1	3	1		12
Rheumatism		21	58	60	53	25	220
Miscellaneous Constitutional		6		33	30	29	98
Apoplexy	1	1		7	1	1	11
Meningitis	1						1
Convulsions				2	18		20
Miscellaneous Nervous		2	10	40	26	12	90
Stomach and Bowels	1	6	85	51	79	20	243
Liver Diseases		1			27		28
Peritonitis					10	1	11
Miscellaneous Digestive	7			10	35	1	53
Bronchitis	13	36	144	90	128	86	447
Pneumonia	3	3	12	9	87	54	117
Miscellaneous Respiratory	9	22	19	51	21	10	132
Organic Heart		9	21	39	23	4	96
Valvular Heart				23	26	7	56
Miscellaneous Circulatory	1		1		15	2	19
Bright's Disease		1	12	54	24	5	96
Miscellaneous Urinary Disease				1	10		11
Asthemia and Premature Birth		5					5
Deformative Children					4		4
Other Children's Diseases	4		2	17	70		93
Obstetric		6	4	6	4	1	21
Puerperal Diseases		5	3	2	1		12
Other Women's Diseases	1		11	45	22	4	83
Accidents	1	2	12	2	2	10	29
Totals	90	98	494	728	1129	368	3006

DISTRICT PHYSICIANS' PRESCRIPTIONS DISPENSED 1920

DISTRICT	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
First Dr. Rothwell	21	15	5	3	9	6	3	1		1	2		65
Second Dr. Kelly	31	9	6	11	5	4		3	2	9	7	6	128
Third Dr. Rodeman	55	6	22	5	1	11	3	8	9	12	11	15	213
Fourth Dr. Ramage	69	85	38	36	2	8	3	4	56	18	19	15	381
Fifth Dr. Coffey	43	51	54	3	5	22	9	4	11	14	24	41	239
Sixth Dr. Jelle	16	27	23	11	1	11	8	4	6	4	11	35	149
Total	205	295	148	123	2	51	16	44	48	58	67	92	1,267

ANNUAL REPORT OF PAROCHIAL SCHOOL MEDICAL INSPECTION

The medical inspection of Parochial School children is one of the most important of the Health Department's activities and is entirely of a constructive or preventive nature. When a number of people congregate regularly in groups, affording intimate contact, there is danger of disease being spread. This is particularly true, however, of younger children. The constant supervision of the pupils and the prompt exclusion and examination of those having suspicious symptoms undoubtedly prevents much sickness and suffering.

In addition to the prevention of contagion, the nurses assigned to this work, of whom there are six, spend all possible time in giving class talks or lectures explaining the various rudiments of hygiene and health to the children, in naturally the simplest of language. The value of a clean body, especially the care of the teeth, is emphasized. The vaccination requirement was again strictly enforced during the year, about 2,500 new vaccinations being secured.

The nurses were able to carry out quite some social service work among the pupils, co-operating with and securing assistance where needed of physicians, attendance officers, institutions and welfare associations.

The following chart shows in detail the various activities of routine nature performed during the year in the various schools:

ANNUAL REPORT OF PAROCHIAL SCHOOL MEDICAL INSPECTION, 1920

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DEPARTMENT OF PUBLIC AFFAIRS

SCHOOL	At School	Examined	Feet, Defective	Eyes and Ears, Defective	Nose and Throat, Defective	Mouth Deflection	Contagion	Vaccination	Hygienic	Vaccinations	Scarlet Defects	Skin Treatments	Dispensary Calls	Class Talk	Class Inspections	Re-inspected	Physic. Examinations	Calls to Laboratory	Home Calls
St. Basil's School	3	24	18	4	2		2	136	99	1	15	81	9	166	169	572	191	76	26
St. Elizabeth's			18	2	16		28	8	1	1	17	19	4	368	368	726	307	173	100
St. John's	1		25	4	45	9	18	9	14	1	17	44	12	187	191	338	198	17	106
St. Joseph's	26	18	31	10	15	0	3	1	2	1	1	4	12	144	66	505	115	39	77
St. Louis	8	18	18	4	7	0	14	11	1	1	1	1	1	36	29	618	191	1	6
Holy Family School	56	18	18	4	7	0	1	16	46	1	1	1	1	36	231	2880	195	44	83
St. Michael's	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
St. Vincent's	27	1	380	83	62	1	3	181	61	104	250	412	26	118	194	377	258	45	114
St. John's	110	62	455	122	112	2	4	395	30	102	354	500	25	156	139	684	350	122	163
St. Rita's	11	30	471	78	75	0	12	146	11	15	128	1	19	175	197	452	361	240	84
St. Clare's	6	4	200	15	11	0	1	289	9	0	18	13	16	137	192	716	300	335	67
St. Patrick's	35	78	246	77	97	1	27	146	14	114	90	419	30	217	125	983	229	177	131
St. Margaret's	97	31	153	47	78	1	19	49	1	51	72	262	30	178	79	645	227	40	69
St. Mary's	14	17	151	50	66	1	4	43	1	41	48	106	19	151	72	548	197	45	72
St. Rose of Lima	21	66	91	95	13	0	48	268	6	1	28	105	62	365	391	946	151	0	80
Sacred Heart of Mary Ave.	71	1	136	69	6	0	38	187	43	1	36	167	38	214	208	2266	94	84	47
St. Augustine's	88	4	143	30	54	0	30	96	149	30	51	337	56	72	71	246	132	64	76
St. Joseph's Ave. Ave. Ave.	74	0	160	12	82	0	8	33	96	58	29	300	34	76	67	302	175	0	51
St. Joseph's	4	0	205	92	106	5	44	122	164	225	122	1065	139	132	88	448	183	82	186
St. Stanislaus	167	4	529	101	89	0	12	75	125	161	71	496	393	207	210	696	257	90	107
St. Anthony's	167	16	17	110	5	16	286	306	9	1	1	1	0	76	179	858	339	147	168
St. Ann's	8	8	96	10	100	0	8	100	84	50	1	1	0	171	171	677	241	121	119
St. Charles Borromeo's	8	1	18	11	1	0	8	86	72	42	1	1	0	140	140	1	190	42	83
St. Lucy's	29	0	81	29	81	0	71	900	14	1	113	900	60	241	257	900	169	10	170
St. Mary Magdalen's	9	0	0	0	1	0	0	0	1	1	1	1	0	12	28	70	35	0	3
Holy Trinity	37	0	2	0	0	0	0	2	0	28	4	69	0	8	8	40	0	0	6

* Closed June 30, 1920.

+ Started September, 1920

At School 23 Examined 101 Feet, Defective 111 Eyes and Ears, Defective 106 Nose and Throat, Defective 96 Mouth Deflection 41 Contagion 41 Vaccination 120 Hygienic 27 Vaccinations 194 Scarlet Defects 84 Skin Treatments 1890 Dispensary Calls 445 Class Talk 285 Class Inspections 672 Re-inspected 470 Physic. Examinations 4705 Calls to Laboratory 1947 Home Calls 2392

BUREAU OF VENEREAL DISEASE

Dr C. V. Craster, Health Officer.

DEAR SIR — I herby submit the annual report of the Venereal Disease Bureau:

The Bureau of Venereal Disease during the year 1920 carried on the operations begun in the previous year and in addition widened its scope to include several new features. Much time was devoted to organization of the bureau as regards personnel and the development of a smoothly operating liaison between the various bureaus of the Department of Health, charitable organizations and institutions of the city, such as the police force, jails and hospitals, in order to obtain as high a degree of co operation as possible. We feel that this factor of co operation cannot be over-emphasized, as it is of paramount importance in work of this nature.

POLICE CO-OPERATION

Work done in co operation with the police of the city, and especially with the vice squad, was particularly successful. All persons arrested for sex crimes were brought to the bureau for examination. In the event of a positive diagnosis, such persons were isolated in a special ward at the Newark City Hospital, where intensive treatment was administered in order to render them non-contagious in as short a time as possible. Upon discharge, if not held for trial or incarceration, they were followed up by skilled social workers and made to report for treatment either to reputable physicians or to the special clinics operated for venereal diseases at the Newark City Dispensary. In addition to this type of work, regular visits were made to the Women's Court in order to assist the work of reclamation being done so successfully in that institution.

A service for the treatment of venereal disease was organized at the request of Dr. Markens, jail physician, for persons suffering with such disease in the Essex County Jail. The service is under the direction of Dr. Andrew Wallhauser, Dr. Samuel Keller being in charge of the cases of gonorrhoea and Dr. Ernest Kautman in charge of syphilis. A special ward has been designated for such cases, and all facilities are given by Dr. Markens for any work necessary.

VENEREAL CLINICS

Clinic work has progressed most favorably, and the number of persons attending them has increased so tremendously that it will soon necessitate extra days for these clinics. Several new plans of treatment were carried out under the personal direction of Dr. C. R. O'Crowley in the Genito-Urinary Clinic and of Dr. L. A. Koch in the Syphilis Clinic. These are to be reported in scientific periodicals in the near future and will, no doubt, be of service in the treatment of these diseases.

AN OUT-PATIENT DEPARTMENT

An out-patient service was established for the service of such patients as were unable to come to the clinic because of other illness, paralysis, or other just cause. This was resorted to because of the overcrowded condition of the Newark City Hospital and the shortage of nurses in that institution. The service has been a success and will be continued.

"THE END OF THE ROAD"

The moving picture, "The End of the Road," was shown weekly to audiences of women at the Young Women's Christian Association. The showing was accompanied by a lecture on the modern view of sex hygiene and the nature of the present campaign against the venereal diseases. This carried on the work begun during the preceding year, 1919, and was unhampered by criticism directed against such propaganda.

This picture has a very practical value, as has been shown many times by the reporting of persons who have gone to physicians for treatment of an infection in time to get the disease under control and so obtain a cure, or who have gone to physicians for the further treatment of an old infection. It has had the further effect that a definite break has been effected in the veil of silence surrounding the subject of sex and has opened up the possibility of introducing the subject of sex hygiene into the higher schools of the city, where it can be taught as any other subject is presented. In this way a most sane and logical aspect is placed upon the matter, resulting ultimately in complete obliteration of the ignorance that prevails at present.

REPORTING OF VENEREAL DISEASES

Reporting of cases of venereal disease by physicians was about the same as last year. There was need to send an occasional letter to physicians not reporting cases under their care, but on the whole there was little difficulty in getting a fair degree of co-operation. The bureau was successful in securing the return of several patients to their respective physicians after the patients had neglected their treatment for a long period of time. Both patient and physician seemed to be in favor of the system employed, and no objection was registered. A most diplomatic handling of the situation is, of course, a necessity, and a high degree of tact was insisted upon to those workers engaging in this type of work.

EXAMINATION OF FOOD HANDLERS

In the routine examination of food handlers throughout the city an examination for the existence of venereal disease in those persons examined was provided. This examination was held every six months, and was as thorough as possible under the circumstances. Suspicious cases were examined most carefully, and any found positive were immediately

urged to take treatment. It was possible to pick up several cases who believed themselves free from such disease. Statistics are given on page 167.

THE FUTURE FOR VENEREAL DISEASE ACTIVITIES

Generally speaking, the work done during the year 1920 was developmental in character. The work planned for the year 1921 will carry the organization of the bureau to a plane of endeavor on a level with any organization of its kind in the country. Attention is called to the report rendered by the United States Public Health Service concerning the status of clinics and treatment centers for venereal diseases throughout the country. In this report a rating of well over 600 points was given out of a possible 1,000, a figure almost double that of our nearest rival for the honors of the State. While we feel that figures and statistics are not the best sought for element in this work, yet we are justly proud of this record. The growth of the clinics for treatment is due to the excellent and modern character of the work done by the chiefs of those clinics and their respective staffs, and this opportunity is taken of thanking them for their services.

BUREAU OF VENEREAL DISEASES

DR. H. J. F. WALLHAUSER	Director
DR. ANDREW WALLHAUSER	Assistant Director
DR. C. R. O'CROWLEY	Chief, Genito-Urinary Clinic
DR. L. A. KOCH	Chief, Syphilis Clinic
DR. NATHAN HELLER	Pathologist
ANNA K. JACOB	Executive Secretary
JACOB SCHAEFFER	Attendant
EDNA SMITH	Social Worker
JAMES CENTANNI	Social Worker
MELVINA RYAN	Record Nurse

1930	SYPHILIS						GONORRHEA						Total Treat- ments Male and Female	Sent to Hospital	Detained in		Number Salvarsan Given
	CHANCROID						New Cases		Old Cases		Hospital Warrants						
	New Cases		Old Cases				Male		Female		Male				Female		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female			Male	Female	
January	21	5	—	—	1	—	44	1	—	—	684	4	5	—	—	47	
February	16	10	—	—	1	—	33	2	—	—	647	1	1	—	—	41	
March	14	18	—	—	3	—	47	3	—	—	696	8	2	—	—	43	
April	22	17	—	—	1	—	41	8	—	—	860	9	6	—	—	64	
May	16	11	—	—	2	1	36	8	—	—	860	14	12	—	—	41	
June	18	13	—	—	—	—	32	5	—	—	864	10	8	—	—	80	
July	5	1	80	93	—	1	33	1	60	10	805	2	1	2	1	62	
August	1	13	81	86	—	—	—	1	9	99	805	1	5	1	4	62	
September	11	9	93	95	—	—	40	5	95	16	975	1	1	—	—	61	
October	7	12	98	107	3	—	—	11	96	28	1,141	2	2	1	1	86	
November	13	7	92	112	1	—	4	—	—	33	1,046	—	1	—	—	45	
December	22	9	121	121	1	—	54	—	188	37	929	—	2	—	—	78	
Total	175	135	964	974	13	2	439	61	690	153	10,302	51	46	4	6	730	

No record had been kept separately of males and females of old cases of Syphilis and Gonorrhea until July

POLICE CASES DURING 1920

Month	Total Number Examined		Total Number Wassermann	Positive Wassermann Reaction		Total No. Syneurs	Positive to Gonorrœus	
	Male	Female		Male	Female		Male	Female
January	9	16	35	—	6	35	3	—
February	3	10	13	—	2	13	—	2
March	7	10	17	—	—	17	—	—
Apr	0	27	37	—	5	37	—	3
May	3	4	7	—	—	7	2	1
June	20	23	43	2	8	43	—	1
July	12	6	28	1	4	28	—	1
August	1	18	30	1	7	30	—	—
September	1	—	30	1	9	30	—	—
October	13	15	28	2	2	28	—	2
November	7	9	16	—	1	16	—	—
December	20	13	28	—	2	23	1	1
Total	117	180	297	7	43	297	6	12

RECORD OF CASES, 1914-1920

From 1914 to 1920 the following positive cases of syphilis were known to exist in the city, as shown by Wassermann tests reported from the City Serological Laboratory

POSITIVE WASSERMANN TESTS

1914	722
1915	808
1916	1,009
1917	643
1918	617
1919	559
1920	1,287

Similarly the laboratory tests for the gonococcus gave positive results from 1915 to 1920.

POSITIVE FOR GONOCOCCUS

1915-1916	235
1917	262
1918	232
1919	410
1920	1,274

REPORT FROM CITY SEROLOGICAL LABORATORY
FOR 1920

Boog Wassermann	7,861
Positive blood Wassermann reaction	1,287
Spinal Wassermann	417
Positive spinal Wassermann	56
Treponema pallidum by dark field	12

EXAMINATION FOR GONOCOCCI

Total number of smears taken	3,166
Positive for gonococci	1,274

PHYSICIANS' REPORTS

	1920	1919
Syphilis	591	571
Gonorrhea	817	1,000
Chancroid	38	182

FOOD HANDLERS EXAMINED

Total number examined	2,215
Number Wassermanns taken	48
Positive Wassermann reactions	8
Number smears taken	10
Positive to gonococci	0

FILM "END OF THE ROAD"

Shown at the Y. W. C. A. to	8,500 people
Shown at the Y. M. C. A. to	7,000 people
Total	15,500 people

Respectfully submitted,

H. J. F. WALLHAUSER, M. D.,
Director, Bureau of Venereal Diseases.

ANNUAL REPORT

OF THE

Division of Tuberculosis

ANNUAL REPORT

OF THE

Division of Tuberculosis

January 1, 1921.

Dr. Charles V. Craster, Health Officer.

DEAR SIR: I herewith present the report of the Tuberculosis Division for the year 1920. This covers the work accomplished through our clinics, nurses, physicians and general field activities.

FIELD WORK

The general work of this division has been greatly increased and as a result we have accomplished nearly 35 per cent more than last year. Although three of our nurses have been assigned to the clinic for examination of food handlers, which was held three afternoons a week for four months, the nursing staff has made 4,073 more calls for 1920 than for the previous year. The attendance at the clinics was greater this year than ever before. There were 3,241 more examinations than in 1919.

EXAMINATION OF CHILDREN

As a preventative measure we must lay a great deal of stress on the prevention of the spread of the disease to children, as we all know that the adult infection is only secondary to that occurring in childhood. It is proven at autopsies that after the age of 14 any infection is a re-occurrence of a previous one in childhood. It is the duty of the Tuberculosis Division to examine as many children as possible, so that the disease can be recognized early and the necessary provision made for the cure and prevention of the spread of tubercu-

losis. To affect and to limit the spread of the disease, it is necessary that every case of tuberculosis be reported to this division, so that we may have an opportunity to see that the proper sanitary, housing and hygienic rules are observed and that the instructions of the physician are properly carried out. The division has requested the various agencies for children's summer camps, i. e., the Female Charitable Society, Anti-Tuberculosis League and the committee in charge of Camp Newark, to have all children examined at our clinic before going to camp. By so doing we have succeeded in examining about 2,300 children. Among these we found about 53 suspicious and active cases of tuberculosis. These undoubtedly would not have been discovered otherwise. The active cases we have sent to the various sanatoria and fresh air camps, while the suspicious ones were put under observation and visited periodically by our nurses.

EXAMINATION OF FOOD HANDLERS

The examination of food handlers for tuberculosis has been another added activity in this division, and by this means we have examined 2,314 cooks, waiters, waitresses, dishwashers, counter-men, etc., from August 10 to January 1, 1921. A total of 26 positive cases has been discovered that would otherwise not have been known to the department. These twenty-six cases were compelled to give up their work as a preventive measure against the spread of the disease to the patrons and fellow workers of food handling establishments. The majority of these cases are now at different sanatoria, where they may be restored to normal health and become useful citizens of the community. In many cases, where conditions made it impossible for a food handler to carry out his duty, going to a sanatorium, the department was not successful in obtaining other employment for him. Many food handlers refuse to appear for examination for fear that if tuberculosis is discovered they will lose their positions and sought other employment.

DEATH RATE AND REPORTED CASES

Although the problem of the prevention of tuberculosis has not been completely solved, still the progress which has been made in the reduction of the death rate must be gratifying to every interested citizen. Statistics show that the City of Newark today stands sixteenth among the largest cities of the United States for the tuberculosis death rate, while heretofore it ranked twelfth.

Although there have been 109 fewer cases reported this year, the death rate is proportionally much lower. With a 5 per cent decrease in the total number of reported cases, the death rate shows a drop of almost 11 per cent over the previous year. This is the lowest death rate that Newark has ever had.

SOCIAL PROBLEMS

We find that the work of the division is being greatly increased because of the greater demand for relief and sanatorium treatment than in previous years. This is due to the wave of unemployment. During the war patients who were not bed-ridden easily obtained employment, receiving high wages, and thereby were able to provide proper care and nourishment for themselves and families. At the present time it is even difficult for the healthy individual to obtain work. This makes the patient more eager to go to a sanatorium where he will at least get proper care for himself. At the same time the family is left in want. The children become undernourished and poorly clad and their vitality becomes lessened, thus making them more susceptible to the disease. The question of the care of dependent children of tuberculous families has been an urgent one in the past year, especially the placing of children in homes or institutions until the parents return from sanatorium.

It is the work of the division to urge and provide facilities for patients in sanatoria, fresh air camps and hotels, and also to urge provision for the recreation of children. The great number of cases discovered through our clinics has put a great

deal to all the sanatoria in the County and State, especially with cases of incipient tuberculosis. The public at large is beginning to look with less suspicion upon the tuberculosis nurse, as they realize that the nurse does not call to interfere with their private affairs or the treatment of their family physician, but to give or help to carry out the instructions of the doctor, thereby preventing the spread of the disease to other members of the family.

CONTEMPLATED ACTIVITIES

We are considering the construction of a large tent on the roof of the Department of Health Building, where tubercular cases will come and obtain vocational training in order to fit them for earning a livelihood. We are also contemplating providing an instructor in basket weaving, knitting, etc., to help these cases financially and at the same time therapeutically.

During the summer months we intend to conduct a series of lectures on tuberculosis to school children and factory employees, giving them personal instructions in the way of the prevention of the disease.

Respectfully submitted,

M. J. FINE, M. D.,
Director, Division of Tuberculosis.

OCCUPATIONS OF REPORTED TUBERCULOUS PATIENTS
FOR YEAR 1920

Housework	476	Grinders .	2
Miners	380	Leatherworkers	2
Factory hands	277	Masons	2
Laborers	269	Steamfitters	2
Clerks	116	Tailors	2
Machinists	91	Baker	1
Food handlers	29	Barber ..	1
Hatters	29	Bar tender	1
Carpenters	11	Boatman .	1
Painters	10	Furrier	1
Jewelers	9	Blacksmith	1
Salesmen	9	Draughtsman	1
Engineers	7	Farm hand	1
Retired	7	Ironworker	1
Cigarmakers	5	Insurance agent	1
Painters	6	Milliner	1
Firemen	5	Musician	1
Nurses	5	Orderly	1
Chauffeurs	4	Roofer	1
Electricians	4	Shoemaker	1
Printers	4	Silversmith	1
Butchers	3	Teacher	1
Conductors	3	Varnish maker	1
Detectives	3	Watchman	1

TUBERCULOSIS CASES FOR YEAR 1920

	1920	1919
Total number of cases reported	1,790	1,899
Total number of deaths	540	637
Total number of visits made by division nurses	19,512	15,439
Total number of children examined at clinics	4,022	1,803
Total number of adults examined at clinics (day)	1,471	1,225
Total number of colored examined at clinics	1,468	1,036
Total number examined at night clinic (adults)	255	167
Total number examined at Garside clinic	301	243
Total number examined at laryngeal clinic	198	
Total number of patients examined at clinics	7,715	4,474
Total number examined at Verona clinic	144	240
Total number examined at Glen Gardner clinic	755	445
Total number examined at Soho clinic	204	171

REFERRED TO OTHER DEPARTMENTS FOR ATTENTION

	1920	1919
Referred to Dispensary clinics	141	258
Disinfecting Division	947	967
Sanitary Division	102	78
Mental Hygiene	20	7
Food and Drug	18	7
Child Hygiene	16	9
Charitable organizations	19	52
Poor and Alms Department	23	33
Employment Bureau	16	11
Widows' Pension		10
Babies' Hospital	2	

NATIVITY OF REPORTED DEATHS FROM TUBERCULOSIS FOR YEAR 1920

United States	346	Spain	2
Italy	45	Africa	1
Poland	36	Bohemia	1
Ireland	28	Cuba	1
Russia	19	Galicia	1
Austria	16	Holland	1
Germany	14	Lithuania	1
Hungary	8	Mexico	1
England	7	Newfoundland	1
Greece	3	Syria	1
China	2	Unknown	1
Sweden	2		
Scotland	2		540

DEATHS FROM PULMONARY TUBERCULOSIS FOR YEAR 1920 BY OCCUPATIONS

Housework	116	Decorators	2
Labors	55	Dressmakers	2
Factory hands	44	Die setters	2
Clerks	34	Flagmen	2
Minors	34	Gardeners	2
Drivers	13	Janitors	2
Leatherworkers	13	Printers	2
Carpenters	6	Inspectors	2
Retired	5	Porters	2
Blacksmiths	4	Machinists	2
Cooks	4	Soldiers	2
Firemen	4	Steelworkers	2
Farmers	4	Tailors	2
Ironworkers	4	Watchmen	2
Painters	4	Bartender	1
Shoemakers	4	Boatman	1
Troismakers	4	Brassworker	1
Waiters	4	Chiropodist	1
Barbers	3	Electrician	1
Hatters	3	Elevator operator	1
Jewelers	3	Engineer	1
Masons	3	Furrier	1
Tinsmiths	3	Lawyer	1
Butchers	2	Lumberman	1

Merchant	1	Pipefitter	1
Minister	1	Roofer	1
Mill hand .	1	Storecutter	1
Messenger	1	Steamfitter	1
Moving picture operator	1	Stableman .	1
Moderator	1	Telegraph operator	1
Orderly	1	Undertaker	1
Plumber	1	Not reported	43
Policeman	1		

OTHER FORMS

Minors	38	Drivers	2
Factory hands	8	Brushmaker	1
Housework	5	Cigarmaker	1
Laborers	5	Storekeeper	1
Bookkeepers	2	Tailor	1
Clerks	2	Not reported ..	4

TUBERCULOSIS CASES REPORTED DURING YEAR 1920 MONTHLY, BY SEX, COLOR, AGE

MONTH	Male	Female	White	Black	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65 to 74	75 to 84	1918 Total	1919 Total
January	121	92	190	23	2	4	7	9	16	39	34	36	24	11			213	187
February	94	56	129	121	6	8	10	13	14	18	34	22	13	12			156	137
March	94	69	148	15	5	7	6	9	19	25	30	30	20	8	1		163	156
April	87	62	127	22	8	5	10	12	10	22	31	23	18	8	2		149	160
May	74	52	101	25	5	3	8	10	8	20	29	21	16	6	1		126	102
June	93	64	140	17	2	5	7	8	14	19	38	31	24	6	4		157	141
July	92	63	139	16	11	5	7	8	11	19	37	31	24	5	4		165	166
August	74	39	97	16	11	2	4	5	6	16	29	21	21	5	3		113	90
September	94	69	149	14	2	4	7	8	6	14	38	42	26	4	2		163	135
October	83	58	133	11	3	2	5	6	8	25	29	36	26	3			143	16
November	74	51	115	10	1	2	4	5	6	19	25	32	20	3	1		125	126
December	86	47	122	11		4	3	5	5	19	35	25	20	7	5	1	133	113
Total	1,068	722	1,589	201	37	51	78	17	120	261	413	350	261	76	21	1	1,790	
1919	1,153	746	1,719	180	7	69	113	170	140	257	454	339	199	85	26	2	1,899	

TUBERCULOSIS DEATHS REPORTED BY WARDS

YEAR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
1930	14	141	183	108	130	99	112	83	86	81	92	99	100	176	92	83	1,790
1919	176	174	212	98	102	80	117	94	92	81	64	92	156	205	97	78	1,899

TUBERCULOSIS CASES REPORTED BY WARDS

YEAR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Unknown	No	Total
																	Residence	Residence	
1930	29	30	45	30	42	37	32	38	20	23	25	32	39	52	17	22	2	5	540
1919	29	46	57	40	35	26	36	28	39	29	95	49	54	33	39	25	16		637

ANNUAL REPORT

OF THE

Division of Child Hygiene

ANNUAL REPORT
OF THE
Division of Child Hygiene

To Dr. C. V. Craster, Health Officer.

DEAR SIR — I herewith submit the report of the Division of Child Hygiene for 1920:

INFANT MORTALITY
84.7 Per 1,000 Births

The infant mortality rate in Newark in 1920 was 84.7, 8 points higher than it was in 1919. The increase in the infant mortality rate in Newark was to be expected, as 1919 presented unusually favorable conditions with an unusually low rate. This experience is similar to that of the other cities of the country. Newark has held, however, its position among the fourteen largest cities in the United States, showing the fourth lowest infant mortality rate. If Los Angeles and San Francisco are omitted, which present entirely different economic, climatic and social conditions, Newark has the second lowest infant mortality rate of the fourteen largest cities in the United States. Another factor that increased the infant mortality in Newark in 1920, and must be considered in making comparisons with other cities or previous years, is the increase in 1920 of the colored population to the extent of 79 per cent., as the infant mortality rate among the colored is usually two or three times that of the white.

A study of the deaths under one year by causes reveals the fact that the increase in the rate was largely due to the causes

of death that are somewhat beyond the control of the activities of the Child Hygiene Bureau. In 1919 there were 27 deaths from contagious diseases, while in 1920 there were 66, an increase of 144.4 per cent. In 1919 there were 129 deaths from bronchitis and pneumonia, and in 1920 there were 200. Particular mention should be made of the great increase in the deaths from measles, which numbered two in 1919 and sixteen in 1920. The only special group of deaths that showed a decrease were those due to gastro intestinal disturbances, which were 244 in 1919 and 191 in 1920. This group is most closely related to preventive child hygiene work.

DEATHS UNDER ONE YEAR FOR 1916-1920 BY CAUSES

YEARS	Measles	Bronchitis	Pneumonia	Meningitis	Diarrhoea	Other Contagious Diseases	Early Infancy Congenital Debility, Prematurity	All Others	Total
1916	23	55	122	24	196	86	435	86	1,026
1917	33	72	121	26	250	50	430	86	1,085
1918	33	84	156	30	273	83	442	112	1,213
1919	2	42	87	24	244	27	345	90	802
1920	16	57	143	19	191	66	402	100	994
Total	74	310	629	123	1,154	312	2,054	473	6,190

PREVENTION OF BLINDNESS

There has been a considerable increase in the number of opthalmic cases, 84 having been placed under supervision in 1920, against 28 in 1919. From one standpoint this can be considered as evidence of better reporting and increased activities on the part of the nurses, who are instructed to report to the physician every eye that shows a discharge. Of the 84

cases, 69 were discovered through smears taken by the division nurses. Of this number 20 were of the severer type and of gonorrhoeal origin. Inasmuch as these cases were not previously reported, it is readily seen that without active supervision from birth records, many severe cases of ophthalmia must be overlooked, with the resulting loss of sight. This was well illustrated by one case which was attended by a midwife who failed to report the case or to instil silver nitrate. The case was brought to our notice by the physician after the child was three weeks old, when one eye was totally destroyed and there was very little chance of saving the other. The experience of the department indicates that the most important factor in the prevention of blindness is the early detection of ophthalmia through nurses visiting every newborn baby and taking smears of every discharge. It also demonstrates that most of the cases can receive proper and efficient care at home if the mothers are properly instructed. Hospitalization is only required in the occasional case.

BOARDING HOMES FOR CHILDREN

The system of private boarding homes has amply justified itself. There are now in the city forty-two boarding homes, which have in the course of the year, given good care to seventy children. In each instance the child was placed by its natural guardian and its board paid by the natural guardian. This point is emphasized because it is the general experience that if an institution exists that will take in such children, the board and care of the children falls upon private philanthropy or the community. The department has not been able to meet, however, the demand for boarding homes. Plans are on the way which will establish one or two temporary shelters and an organically directed committee that will assist in the finding of boarding homes. It is felt that even though there is difficulty temporarily in placing certain children it will be to the advantage of the community and the children to follow the present policy of developing only private boarding

homes and temporary shelters. Institutions for the care of well children is a poor policy both from a social and health standpoint.

PREVENTION OF MATERNAL MORTALITY AND DEATHS OF THE FIRST MONTH

It is recognized that continued progress in the reduction of infant mortality must come from reduction of the deaths in the first month, as they constitute one-third of the deaths under one year.

The high death rate of the first months is to be attacked by proper care of the expectant mother, supervision of all women, improved medical care of mothers, and prompt and early supervision of new-born babies.

Students of this problem have also been very much impressed with the higher maternal mortality that has existed in the United States and in the increase that has occurred in the last five years. In Newark the maternal mortality rate was 224 per 1,000 live births in 1916 and 157 in 1920 that is in 1916 approximately 1 of every 454 mothers lost their life in childbirth, and in 1920, 1 in every 175.

It has been the impression of certain statisticians that the increase in the maternal mortality rate was due to the increase of the number of mothers delivered by midwives. A careful study of the figures in the City of Newark shows that there has been a reduction in the maternal mortality among mothers delivered by midwives. The rate in 1920 was .4 of a point lower than in 1918, and 1 of a point lower than in 1919. A comparison of the maternal mortality rate with the percentage of mothers delivered by midwives will show that as the maternal mortality rate has gone up in Newark, the percentage of cases delivered by midwives has gone down. This will indicate that we must look elsewhere for the increased maternal mortality.

PUERPERAL DEATHS, 1916-1920

	1916	1917	1918	1919	1920
Total number of puerperal deaths for entire city ...	26	29	53	56	76
Midwives in attendance at any time	6	6	10	8	7
Rate per 1,000 deliveries for entire city	2.2	2.4	4.6	4.9	6.7
Rate per 1,000 deliveries attended by midwives	1.1	1.0	1.9	1.6	1.5
Total number of births for entire city ..	11,446	11,850	11,601	11,315	11,734
Total number of births attended by midwives ..	5,582	5,695	5,338	5,148	4,712
Percentage of births attended by midwives.....	48.8%	48.0%	46.0%	45.4%	40.1%

Four hundred more mothers received prenatal care in 1920 than in 1919, and 600 more than in 1918. Five hundred and thirty one of the women receiving prenatal care were delivered during the year. The still birth rate in this group was 29.7 per 1,000 deliveries. The rate for the entire city was 38.2 per 1,000 deliveries. There were no deaths in this group of 531 mothers. In the city as a whole the maternal mortality rate was 5.7, or one in every 175. If we combine 1919 and 1920 we have a record of 1,019 deliveries among our supervised expectant mothers with a record of one death, a rate of .9 per 1,000 deliveries, in contrast with the maternal mortality rate for the city, which is 5.3 for the two years.

There is a very large contrast in the deaths of the infants under one month, between those of mothers who received prenatal care and for the babies of the entire city. The mortality rate of the babies under one month of mothers receiving prenatal care from the division was 15.5 while the rate for the entire city was 38.7.

The deaths under one month in the City of Newark represent now approximately one half of the deaths under one year. In the beginning they represented one third. This

shows very clearly that most of the preventable deaths in the period between one month and one year are being prevented and that further progress will only come by concentration upon the prenatal, natal and neonatal period.

Additional prenatal clinics have been established and placed in charge of Dr. N. G. Price, who has volunteered his services and is especially interested in this field of medicine.

SUPERVISION OF MIDWIVES

The supervision of the midwives has been continued along the same lines as outlined in previous reports. The best evidence of the continued progress that is being made in the development of the higher standards is evidenced by the picture of the Essex County Midwives Association, which shows the midwives in the gowns they wear at their deliveries.

UNMARRIED MOTHERS

The infant mortality of illegitimate babies in Newark in 1920 was 78.4—10 per cent lower than for the city as a whole. The supervision of unmarried mothers has been primarily undertaken to protect the life of the illegitimate infant, as it has been found that the infant mortality among these babies is usually two or three times as high as that of the city or country as a whole. This experience is universal. The same principle that has been adopted in regard to the babies of the city, that is, supervision of new-born babies from birth records has been applied to this particular group of infants by means of arranging with the hospitals to have the department notified of the admission of all unmarried mothers. The unmarried mother and her baby are then supervised by the division for at least one year, after which time a worker of the School of Social Hygiene tries to keep in touch with the mother.

A few facts will point out the results of the method that has been adopted. Of 89 babies supervised during 1920 only

nine were boarded out during the year. This fact will mean much to those who have been familiar with the unmarried mother problem, as it has been considered almost impossible to keep the infants with their mothers. This result receives additional emphasis when it is pointed out that 27 per cent were colored, among whom it was always found necessary to separate mother and infant at an early date.

The results obtained are largely to be ascribed to the devotion that has been shown to this class of mothers by the supervisor, Mrs. Mabel M. Philpot, and by the active co-operation that has been received from the hospitals and Church Mission of Help.

The Convalescent Home for Nursing Mothers has made it possible to take care of 23 mothers and infants for periods from one to six months and to keep together mothers and babies that heretofore were separated.

Special emphasis is placed upon the fact that 58 out of a total of 89 were returned to their own homes, 23 were placed in the Convalescent Home, and 18 were placed in positions with their infants. Another very impressive fact is that out of 47 babies who have reached the age of six months, 24 were entirely breast-fed and the other 23 were partially breast-fed. This indicates, of course, that the baby was not only with its mother, but it was being given the same chance for a healthy growth as any other baby. It is also remarkable that in this group of mothers there were no maternal deaths.

SUPERVISION OF UNMARRIED MOTHERS

Total number of illegitimate births in entire city	127
Total number of cases referred to division	107
Total number of cases not located	18
Total number of cases supervised by division	8
Mothers returned home with babies from hospital	58
Mothers placed with babies in Convalescent Home	23
Mothers placed in positions with babies	18
<hr/>	
Number of babies who reached 6 months of age during 1920	47
Entirely breast-fed for 6 months...	24

Partially fed	23
Number of babies who reached 3 months of age during 1920	7
Entirely breast-fed for 3 months	37
Partially breast-fed	33
<hr/>	
Babies placed in boarding homes without mother (white, 6, colored, 3)	9
<hr/>	
Total number of reported illegitimate births	127
Total number of deaths under 1 year of babies born in 1920	10
Infant mortality rate	78.4
Still births	3
Still-birth rate	2.36
Age at Death—	
Over three months	2
Three months and under	8
One month and over two weeks	15
One day	44
Mothers who died in childbirth, or within one month.....	6

STATISTICAL SUMMARY 1920 INFANT MORTALITY RATE

A. Deaths Under One Year per 1,000 Births -	
1 For entire city	84.7
2 For infants supervised by division	69.4
B. Deaths Under One Month per 1,000 Births—	
1 For entire city	38.7
2 For infants of mothers who received prenatal care from division	17.5
C. Still births per 1,000 Living Births—	
1 For entire city	38.2
2. For infants of mothers who received prenatal care from division	8.7
D. Puerperal Deaths per 1,000 Deliveries—	
1 For entire city	5.7
2. For mothers who received prenatal care from division	0.0
E. Total births	11,734

Total deaths under one year.....	994
Total deaths under one month.....	454
Total still-births	448
Total puerperal deaths	67
Attended by midwives at any time.....	8
Attended by physicians.....	59

RESULTS OF PRENATAL SUPERVISION

	1920	1919	1918
Total number of expectant mothers who received prenatal care	1,680	1,290	1,058
Pregnancies ended	531	478	497
Miscarriages	11	7	14
Mothers delivered	520	471	483
By midwives	384—73.8%	412—87.4%	396—81.9%
By physicians	100—19.2%	39—8.3%	55—11.4%
In hospitals ..	36—7.0%	20—4.3%	32—6.7%

Per Cent of Deliveries—

Living births	505—97.1%	459—97.4%	472—97.3%
Attendant—Midwives	380	407	389
Physicians	92	36	51
Hospitals	33	16	32

Rate of 1,000 Deliveries—

Still-births	15—29.7	12—25.4	12—24.8
Attendant—Midwives	1	8	8
Physicians	11	2	4
Hospitals	3	2	0
Deaths of infants during the first month	14—27.7	9—19.1	9—18.6
Attendant—Midwives	4	7	9
Physicians	9	1	0
Hospitals	1	1	0
Puerperal deaths	0	1—2.1	5—10.3
Attendant—Midwives	0	1	3
Physicians	0	0	0
Hospitals	0	0	2

FEEDING OF SUPERVISED BABIES

(Effect of Supervision of Babies on Maternal Nursing)

	1920	1919	1918
<i>Prenatal Cases—</i>			
Living at end of first month	491	450	463
Infants entirely breast-fed at end of one month	473 - 96.3%	447 - 99.3%	454 - 98.0%
Infants partially breast-fed at end of first month	10— 2.1%	1 - 0.3%	1— 0.3%
Infants entirely artificially fed at end of first month	8— 1.6%	2— 0.4%	8— 1.7%
<i>Birth Record Cases—</i>			
Number of terminated cases	1,991	1,302	1,431
Infants entirely breast-fed at six months	81.4%	87.5%	87.4%
Infants partially breast-fed at six months	10.3%	9.9%	10.3%
Infants entirely artificially fed at six months	8.3%	2.6%	2.3%

OPHTHALMIA NEONATORUM

	1920	1919
Cases referred to division for investigation and supervision	84	28
Results positive	41	10
<i>Condition—</i>		
Cured	80	27
Improving	2	0
Died	1	1
Blind	1	0
<i>Treatment—</i>		
Physician	4	0
Hospitals	2	2
Entirely at home	66	22
At Dispensary	9	2
At home and Dispensary	3	2
Attendant at birth, midwives	69	25
<i>Silver Nitrate Used—</i>		
<i>Midwives' Cases—</i>		
Yes	68	23
No	1	2

Physicians' Cases

Yes	10	3
No	1	0

Hospital Cases

Yes	4	0
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BOARDING HOMES

Requests for boarding homes.....	96
Boarding home address given	43
Other solution	53
Infants boarded out during 1920	64
Infants in boarding homes at end of year	70
Infants taken home by relatives	45
Infants placed in institutions.....	2
Infants placed for adoption.....	1
Sick children	15
Deaths	1

NURSES' ACTIVITIES

	1920	1919
Supervised babies	3,011	3,706
Nurses' visits to homes	32,591	30,783
Mothers' visits to consultation stations	3,963	3,920
Expectant mothers receiving prenatal care	1,680	1,290
Bad housing conditions reported	666	448
Contagious diseases reported.....	141	33
Pre school examinations, defects detected	146	226
Eye smears taken	69	27

Respectfully submitted,

JULIUS LEVY, M. D.,
Director, Child Hygiene Division.

ANNUAL REPORT

OF THE

Mental Hygiene Bureau

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OF THE

Mental Hygiene Bureau

Dr Charles I. Craster, Health Officer Newark, N. J.

SIR:—I herewith submit the annual report of the Bureau of Mental Hygiene for the year 1920.

This bureau was established in the Department of Health on June 1, 1919, because it was recognized that mental hygiene should be incorporated into the public health service in Newark. The progress of the department has already been set forth in a previous report of the work for the first six months. The development has been rather slow for the want of funds. The work planned during the preceding year has been carried out to a large extent, except that the problems of the juvenile delinquents and the parochial school examinations have not been fully taken up and carried out as initially planned.

However, without any effort on the part of the bureau to advertise or to give publicity to the work of the bureau, the various organizations have made applications for assistance of some kind or another. Cases were referred from the following sources: Federal Employment Bureau, personal application, Internal Revenue Inspector, Interchurch World Movement, City Police Department, Newark Technical School, Probation Office, United Hebrew Charities, neighbors, relatives, Judge of Criminal Court, Italian Church Mission, Factory Social Worker, Department-Store Social Worker, Schools for Mental Defectives, Psycho-Educational Clinic, Eye and Ear Infirmary, Children's Aid Society (former drug

addicts, New Jersey Urban League, hospitals of the city, Church Mission of Help, Women's Court, Catholic Children's Aid, Public School Nurses, Divisions of the Department of Health (Child Hygiene Division, Dental Clinic, Neurological Clinic, Parochial School Nurses, Pediatric Clinic, Tuberculosis Division, Venereal Disease Division), Dispensary Receiving Nurse, American Red Cross, United States Public Health Service of Newark and New York, Physicians, Bureau of Social and Family Service, Parental Home, Silver Lake Welfare Association, private individuals, Montclair Altruist Society, Elizabeth Charity Aid, Bloomfield League for Friendly Service, Essex County Penitentiary, Elizabeth Visiting Nurses' Association, Parole Officer, Jamesburg Reformatory

As the result of our work during the past year we have begun to appreciate the importance of educating the public more definitely with regard to what mental hygiene really is. People have not yet learned to realize that there is a fundamental difference between psychiatry and mental hygiene. Psychiatry is that part of mental medicine which deals with the treatment of mental disorder. Mental hygiene is the science of the prevention of mental disorder by adjustments of behavior. It is concerned with the problems of the individual as a whole, the development of his personality and his relations to the community and his environment.

Mental hygiene work is largely individual and personal. We have had under consideration the publication of leaflets and tracts setting forth some of the problems of mental hygiene but because of the peculiar distortions that are likely to take place in the minds of people when they read such information, we have deferred it until such time that more definite knowledge might be gained through personal work with the various organizations.

The following gives a varied list of some of the reasons for application for relief to the Bureau of Mental Hygiene.

sleeplessness, worry, excitement, inattention, depression, seclusion, fears, tantrums, excessive cigarette smoking, too great fondness for "movies," bad habits, sex delinquencies, disagreements at home, fidgety behavior, crying and laughing spells, stealing, lying, begging, romancing, day dreams, marital difficulties, "too many very short period jobs," inability to work, unemployment, defects of speech, hearing, sight, retardation, mental defectiveness, drug addiction, spells or fits, illegitimacy, bed wetting, night terrors, social and anti-social behavior and various somatic complaints.

CLASSIFICATION OF THE CASES REFERRED

Psychoses, 80, constitutionally inferior, 17, war neuroses, 50, social maladjustment, 21; unclassified, 102, investigation only, 10, mental defectives, 62, drug addicts, 67, epileptics, 22; delinquents, 20.

PSYCHOSIS

This group has afforded an opportunity to explain mental disease to the relatives and individual interested in the patient. The greatest help given these patients was the placement of them in the observation ward of the City Hospital and convincing the relatives that the treatment in special hospitals meant the patient's only chance of return to normal living. Those other patients who attend the clinic have shown such improvement that reports later sent to the bureau have been very gratifying.

UNCLASSIFIED

The constitutional inferiors, psychopathic personalities, mild forms of hysteria, approaching shut-in types, pathological ears, etc., in fact, those individuals who have become family problems or who cause the worker of the charity organization continual trouble, have been termed unclassified. Out of this group, one was diverted from an unwise early marriage, two yielded to advice and encouragement

regarding a contemplated change, arising from abnormal ambitions, and the environment of another has been improved and more symptoms of the shut-in type averted.

PARESIS

Though only a few cases of paresis have come to the notice of the Bureau, they remain difficult problems. It was necessary to commit three to the Essex County Hospital for the Insane. The others are not so deteriorated but that they could undertake a certain degree of work of a suitable kind and thus not be an immediate burden to their families.

EPILEPTICS

The problem of the epileptic is always a difficult one. Many epileptics have received medication from the Neurological Clinic of the City Dispensary. Twenty-two cases were referred for social service interest, ranging in ages from 6 to 35 years. Five have been sent to the Epileptic Village at Skilton. Home and office visits with the remaining patients and their relatives have aided in bettering in many ways the adjustments of these individuals. Of three ex-soldiers I met through the American Red Cross, one is doing satisfactory work, one is about to continue his employment and the third was sent by the United States Public Health Service to a military hospital. A young boy interested in a 14-year-old Italian boy, whose people were in fair circumstances, came out the story that the boy had been expelled from school but seemed anxious to learn. A school teacher who was interested in such problems was found by the social worker and gave her a job as a work after school teacher, tutoring the boy, the family paying a small amount. The result was that the boy was successfully controlled by his family and was taking on a new interest. He is now only an occasional as a rule spent in annoying others.

Many families do not wish to send their epileptic children, who have fairly normal intelligence, to institutions and can afford to give close home supervision. The possibility of having a special class in the public school under the Board of Education, to which such children could be taken, has been discussed, and it is hoped that such action will in the near future be planned.

MENTAL DEFECTIVES

As the community learned of the existence of a Bureau of Mental Hygiene, many cases of marked mental defectiveness were referred. Parents, relatives and organizations sought aid with the cases of their feeble-minded burdens. There are but two State institutions for feeble minded in New Jersey, both in the southern part of the State. Both are overcrowded, each having a long waiting list of from 100 to 150. A total of 62 have been registered at the bureau, as follows:

Under 5 years....	5
5-15 years	43
16-20 years	7
Over 21 years	7
Total	62

The social worker explained to those responsible for the future of the patient his handicap, his possibilities and impossibilities. An attempt was made to educate those coming in contact with the patient to understand and aid him. Those of school age not already examined by the Psycho-Educational Clinic were referred to that center for examination. Of the 43 of school age, 29 were examined by the Board of Education Clinic. Most of the remaining were too low grade to make full psychological examination necessary or possible. Some of those examined were transferred to different classes or to special public schools for mental defectives. Where institutional care was advised, the cooperation of the family was obtained, and in many cases commitment papers were

filed. Two cases on the verge of delinquency were committed after considerable correspondence and explanation. There still remained a large number of feeble minded girls whose families are anxiously awaiting an opportunity for their commitment. Those individuals both feeble-minded and delinquent under the authority of the Juvenile Court were referred to the bureau in consultation for their final disposition. Three cases were referred from out of town, examinations made and recommendations given. The problems of these feeble minded over 15 years of age is acute. With the crowded institutions and the necessity for daily employment of members of the patients' families, the solution as yet remains unknown.

DRUG ADDICTS

Early in 1920 the Narcotic Clinic in New York City closed cutting off a source of supply. The addicts crowded into the Department of Health and were referred to the bureau, there begging assistance to secure drugs through the Mental Hygiene Clinic. The clinic does not give drugs or drug treatment. Between March and the end of December, 67 cases were referred. The internal revenue officer, in close touch with all the addicts in the city, came to the bureau to advise as he realized these men and women were without the drug and needed it for compensative treatment to prevent serious consequences. The wards at the City Hospital at that time were unavailable, because of preparations for influenza patients. Dr. Guy Payne, superintendent of the Essex County Hospital for the Insane, was consulted and a plan evolved. The addicts were admitted as voluntary commitment cases, with the understanding that they would follow the course prescribed. The farm land at the hospital and the approach of spring afforded splendid opportunities for out of door rehabilitation work. The majority of cases first discussed with the social worker the details of the long treatment necessary and were offered assistance in readjusting

when leaving the hospital. When possible the co-operation of the patients' relatives and friends was obtained before the patient was sent to the hospital. A treatment was given satisfactory to the patient, but as soon as free from the drug for a few days and not being under the surveillance of the institution he requested his release. A few were given outdoor work as planned, but they, too, left, though they afterward admitted that they knew they should have remained and requested readmission. Three weeks was the longest duration of any drug patient's stay at the hospital. No readmissions were allowed after two or three had returned and proved the inadvisability of the plan. Their only present chance for treatment is at the City Hospital in the observation ward, where courses of treatment vary and there is no opportunity for convalescence and after-care. Although this is apparently a discouraging group to deal with, several are still off the drug and are doing well. Some of these, after their treatments, referred other addicts to the bureau.

DELINQUENTS

The greater number of this group were referred by the Juvenile Court (Parental Home), and the parole officers, a few come through the Women's Court and others from the Church Mission of Help. Examinations by the Psychiatrist and investigations by the social worker resulting in recommendations comprised most of the work with these cases. A few have been left with the bureau for future consultation, the referring agency remaining interested.

SOCIAL MALADJUSTMENT

Under this heading are grouped individuals who could be aided without the treatment of a psychiatrist. Social service treatment as an explanation of misunderstandings, advising change and kind of employment, the settlement of discussions between members of a family, change of living quarters and

in joining Y. M. C. A. or Y. W. C. A. for classes, reading, friends, played a large part in the solution of the immediate difficulty.

INVESTIGATION ONLY

These cases needed investigation by a trained worker and the results will perhaps demonstrate the value of a social worker for the City Dispensary.

STATISTICAL

Cases referred, January 1 to December 31, 1920	451
Cases carried from December, 1919	59
Cases reopened, January 1-December 31, 1920	7
Cases died, January 1-December 31, 1920	2
Cases closed, January 1-December 31, 1920	299
Cases carried to January 1, 1921.....	216
Ages of patients ranged from 9 months to 78 years	
Patients placed on observation ward, City Hospital, for observation of mental symptoms.....	26
Patients committed to the Essex County Hospital, Cedar Grove	14
Patients committed to the State Hospital, Morris Plains	2
Patients sent to Belle Mead Hospital through U. S. P. H. S.	2
Patients sent to Marine Hospital, Staten Island, N. Y., through U. S. P. H. S.	2
Patients sent to State School for the Deaf	1
Papers filed for commitment to State Home for Feeble-Minded Males, New Lisbon	3
Patients committed to State Home for Feeble-Minded Males, New Lisbon	1
Papers filed for commitment to New Jersey Village for Epileptics, Skillman	2
Patients committed to New Jersey Village for Epileptics, Skillman	5
Papers filed for commitment to New Jersey State Home for Feeble-Minded Women, Vineland	11
Patients committed to New Jersey State Home for Feeble-Minded Women, Vineland	1
Patients sent to Alms House, awaiting commitment to institution	1
Patients sent to City Hospital for drug treatment	29
Voluntarily committed to Essex County Hospital, Cedar Grove, for drug treatment	29

Convalescent care arranged for patients.....	4
Country outings, summer vacations.....	10
Consultations at office with patients.....	801
Consultations at office with persons interested in patients.....	550
Home visits.....	206
References in and consultations by telephone (to reduce clerical work for which there was no force).....	1,170
Reference visits regarding patients by the social worker.....	914
Patients at clinics.....	108

In conclusion, the valuable assistance in furthering the work of the bureau given by Dr. Ambrose F. Dowd, Dr. William T. Ramage, Dr. Julius Sobin and Dr. Francis M. Shockley is gratefully acknowledged. The constant and untiring work of Miss Beatrice M. Gosling, who maintained and perfected the social service work upon which so much of the success of the bureau has depended, must be especially recognized and commended.

We express our gratitude to the National Committee for Mental Hygiene for its generosity and valuable assistance in starting this work by providing funds for the services of a psychiatric social worker.

Respectfully submitted,

C. C. BELING,

Director, Bureau of Mental Hygiene.



Special Tables of Vital Statistics

Dr. Charles V. Craster, Health Officer.

DEAR SIR:—I hereby submit the Vital Statistics for 1920·

Death rate per 1,000 population.. .. .	13.4
Birth rate per 1,000 population.....	28.3
Deaths under one year per 1,000 births.....	84.7

Respectfully submitted,

ELBERT S. BALL,
Clerk in Charge of Vital Statistics.

MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR FOR THE YEAR 1920

212

DEPARTMENT OF PUBLIC AFFAIRS

CAUSES	Year	Colored	White	Total	Males	Females	Under 1	1 and under 2	2 and under 5	5 to 14	15 to 24	25 to 44	45 to 64	65 and over
Infantile Paralysis	6	443	502	945	480	465	294	3	1	142	22	37	147	14
Typhoid Fever	1	6	7	13	5	8	2	3	1	6	1	1	1	1
Malaria	8	8	8	16	5	11	—	—	—	—	5	3	—	—
Syphilis	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Measles	1	49	59	108	29	21	16	25	9	59	—	—	—	—
Scarlet Fever	12	12	12	24	5	7	—	1	6	7	3	1	1	—
Whooping Cough	4	52	56	108	26	30	40	8	8	56	—	—	—	—
Diphtheria	1	6	6	12	7	5	6	10	—	48	3	1	—	—
Polio	8	19	2	21	—	—	14	—	—	16	—	—	—	—
Pharyngeal and Cervical Swallowing	4	12	16	28	—	—	3	—	—	—	2	—	—	—
Other Specific Diseases	1	1	1	2	—	—	—	—	—	—	—	—	—	—
Diarrhoea and Dysentery (Combined)	2	66	49	115	58	57	—	—	3	5	9	—	—	—
Diarrhoea and Dysentery	3	31	34	65	19	14	7	—	—	6	4	—	—	—
Other Diarrhoeal Diseases	11	21	36	57	14	17	3	1	2	6	7	11	6	7
Cancer, Malignant	8	290	368	658	158	210	—	—	—	5	2	1	20	104
Softening of the Brain	3	31	39	70	22	16	—	—	—	5	4	7	3	—
Stroke	10	24	24	48	12	17	—	—	—	—	—	—	—	—
Organic Heart Disease	3	49	49	98	24	25	6	1	—	16	25	—	—	—
Bronchitis	14	91	105	196	61	64	67	9	3	69	1	8	13	18
Pneumonia, Lobar	54	399	454	853	212	241	34	37	18	93	15	35	154	19
Pneumonia, Bronch	34	268	302	570	153	175	15	11	23	192	—	—	30	31
Other Respiratory Diseases	3	81	84	165	42	42	5	5	1	11	2	3	18	26
Diseases of Stomach (Cancer excepted)	3	49	45	94	23	23	12	—	—	15	—	1	11	1
Diseases of Intestine (Cancer excepted)	17	22	24	46	10	10	10	—	—	24	—	—	—	—
Appendicitis and Peritonitis	3	55	6	61	26	24	—	—	—	13	—	14	—	—
Intestinal Obstruction	2	11	3	14	1	1	—	—	—	1	—	—	—	—
Cancer of Liver	—	—	1	1	—	—	—	—	—	—	—	—	—	—
Biliary Disease and Nephritis	1	34	472	506	200	247	—	—	—	—	—	—	—	—
Diseases of Women (not Cancer)	1	3	4	7	—	—	—	—	—	—	—	—	—	—
Pharyngeal Cancer	1	21	27	48	—	—	—	—	—	—	—	—	—	—
Other Puerperal Diseases	2	42	45	87	—	—	—	—	—	—	—	—	—	—
Conjunctival Debitity and Malformation	38	264	279	543	212	229	49	—	—	—	—	—	—	—
Accident	1	24	24	48	12	22	—	—	—	—	—	—	—	—
Homicide	3	24	24	48	12	22	—	—	—	—	—	—	—	—
Suicide	3	44	47	91	30	17	—	—	—	—	—	—	—	—
Infantile Causes	1	1	2	3	—	—	—	—	—	—	—	—	—	—
All Other Causes	44	219	264	483	177	207	30	10	19	75	15	10	19	7
TOTALS FOR 1919	7	41	506	547	272	275	80	190	180	208	209	14	121	120

The death rate for the year was 13.4 per 1,000 of population as against 12.6 for the previous year. The present population of Newark is 414,216. The estimated population for 1919 was 410,000.

MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY MONTHS 1920

CAUSES	Totals for 1920	Jan	Feb	Mar	Apr.	May	June	July	Aug	Sept	Oct	Nov	Dec
TOTAL Causes	484	616	854	414	463	480	348	563	300	351	370	375	444
Infantile Paralysis	7		1					1	1	3		1	
Typhoid Fever	8		1			1			2	2			1
Malaria													
Smallpox													
Measles	70	5	7		9	7	8	1	2		1		3
Scarlet Fever	12		1		2		2			1	1		3
Whooping Cough	56		4	11	5	4	5	6	6	4	6	3	2
Diphtheria	42	7	11	5	7	5	1	4	2	1	5	4	1
Influenza	222	39	159	17	4	2							1
Epidemic Meningitis (Cerebro Spinal)	16	4	1		1	3	1	2	2	1	1		
Other Epidemic Diseases	1				1								
Tuberculosis of Lungs (Consumption)	470	49	59	34	44	38	43	32	44	23	34	29	40
Tuberculous Meningitis	24	5	1	5	5	1	1	3	4	2	5	1	1
Other Tuberculosis	36		6	7	2	1		1	4		5	1	
Cancer, Malignant Tumor	368	86	59	39	27	34	34	29	28	33	28	29	31
Syphilis	39	4			6	3	4	4	1	1	5		6
Alcohol, Softening of the Brain	77	24	8	9	20	14	3	15	13	7	21	29	47
Organic Heart Disease	492	61	51	56	49	43	39	28	26	29	38	34	39
Atherosclerosis	105	16	25	13	11	6	6	8	3	5	2	7	8
Pneumonia, Lobar	454	78	138	53	43	35	13	8	7	13	13	22	37
Pneumonia, Broncho	302	41	98	27	33	24	7	9	3	9	5	10	26
Other Respiratory Diseases	81	10	18	9	13	4	6	5	3	8	4	5	4
Diseases of Stomach (Cancer excepted)	15			1		3		5	4				1
Diarrhoeal Diseases (Under 5 years)	244	15	17	9	5	14	8	44	42	34	17	26	13
Appendicitis and Typhlitis	6	3	3	3	9	4		8	6		1	1	3
Bile, Intestinal Obstruction	26	4	3	3	3	1		9		1	4	5	6
Cirrhosis of Liver	20	3				6		7	2	4	1	2	1
Diabetes Disease and Nephritis	107	53	24	24	20	47	37	28	30	29	45	43	50
Diseases of Women (not Cancer)	4					1		2	1				
Puerperal Septicemia	20		9		9	1	1	4	1			2	4
Other Puerperal Diseases	45	1	5	5	2	6	6	5	3	7	1	1	3
Constitutional Debility and Malformation	402	42	38	42	26	42	27	23	26	25	32	30	34
Old Age	34	5	4	4	6	5	2	5	3				
Accident	276	27	31	16	22	28	25	22	22	21	25	19	20
Homicide	14	1		4	1		1	1	2		1	1	1
Suicide	47	2	3		4	4	2	7	7	7	2	8	1
Undeclared Causes	4				1	1							
All Other Causes	684	64	60	53	59	77	52	43	48	50	60	45	53

YEARLY MORTALITY FIGURES, 1916-1920

CAUSES	Total Deaths for 5-Year Period 1916-20					
	1920	1919	1918	1917	1916	
	1916-20					
Total, All Causes	32 130	5,551	5,534	5,483	6,305	6,337
Infantile Paralysis	402	7	2	6	11	376
Typhoid Fever	72	8	9	15	17	23
Malaria	1	-	-	-	-	1
Smallpox	-	-	-	-	-	-
Measles	284	50	7	130	5	102
Scarlet Fever	45	12	12	11	5	7
Whooping Cough	199	56	4	54	60	25
Diphtheria	300	62	50	82	50	57
Influenza	1,543	222	267	1 387	24	43
Other Epidemic Diseases (Cerebro Spinal)	148	16	22	4	43	90
Other Epidemic Diseases	9	1	2	1	4	1
Diseases of Lungs (Consumption)	3 694	470	352	683	704	685
Tuberculous Meningitis	239	34	41	61	42	61
Other Tuberculosis	245	36	44	54	74	37
Cancer, Malignant Tumor	1,753	368	368	331	361	335
Simple Meningitis	187	30	30	35	45	38
Atrophy Softening of the Brain	1,672	297	317	319	356	343
Organic Heart Disease	2,787	492	529	672	599	496
Bronchitis	673	105	98	178	155	137
Pneumonia, Lobar	2,965	454	432	1,029	553	497
Pneumonia, Broncho	1,460	302	213	469	211	254
Other Respiratory Diseases	550	84	57	92	187	180
Diseases of Stomach (Cancer excepted)	290	45	53	71	66	64
Diarrhoeal Diseases (under 5 years)	1,449	244	295	331	315	294
Atrophy of Intestines	266	61	54	64	51	67
Hernia, Intestinal Obstruction	218	36	49	64	63	38
Cirrhosis of Liver	245	32	42	51	71	49
Bright's Disease and Nephritis	3,042	507	504	629	698	704
Diseases of Women (not Cancer)	84	4	11	6	18	47
Puerperal Septicæmia	65	22	14	11	6	12
Other Puerperal Diseases	166	45	42	42	23	14
Congenital Debility and Malformation	2,054	402	345	442	430	435
Old Age	226	34	34	27	45	85
Accident	1,570	278	304	389	296	303
Homicide	99	14	25	20	25	14
Suicide	272	47	56	60	64	55
Undefined Causes	5	2	-	2	-	1
All Other Causes	3 089	664	659	640	681	476
Yearly Death Rates (per 1,000)	13.4	12.6	19.7	15.3	16.5	

ANNUAL DEATH RATES FOR FORTY-THREE CITIES IN
1920 PER THOUSAND OF POPULATION

(Estimated Population July 1, 1920, by U S Bureau of the Census)

Nashville	18.5	New Haven	14.4
New Orleans	17.6	San Francisco	14.3
Atlanta	17.4	Worcester	14.2
Denver	17.3	Buffalo	14.2
Birmingham	16.5	Los Angeles	14.2
Pittsburgh	16.3	Spokane	14.1
Kansas City, Mo.	16.1	St. Louis	14.1
Albany	15.7	Jersey City	14.0
Lowell	15.6	Toledo	13.8
Boston	15.5	Grand Rapids	13.2
Providence	15.5	NEWARK	13.2
Baltimore	15.4	New York	12.9
Cincinnati	15.1	Chicago	12.8
Syracuse	15.1	Cleveland	12.4
Cambridge	14.9	Minneapolis	12.2
Indianapolis	14.7	St. Paul	12.2
Columbus	14.7	Portland, Ore.	12.1
Washington, D C	14.6	Dayton	12.0
Fall River	14.6	Rochester	12.0
Louisville	14.5	Milwaukee	11.7
Philadelphia	14.5	Oakland	11.6
		Seattle	10.5

Newark's death rate for 1920 is the twelfth lowest out of forty-three cities, while in 1919 it was the fourteenth lowest rate.

GENERAL TABLE NO. 1, 1920

Deaths from all causes, not including non-resident or unknown deaths by war, age and sex, including deaths in City Hospital and the Sanatoriums at Sobor and Verona, New Jersey

AGES	WARDS																Total
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	15th	16th	
Under 1 year																	
Males	64	19	18	15	47	19	34	97	46	4	17	4	7	45	12	25	544
Females	41	10	37	16	32	19	32	16	21	4	12	41	23	44	8	12	446
Between 1 and 4—																	
Males	27	4	20	2	23	5	19	12	6	24	3	30	12	27	9	8	221
Females	17	5	16	9	17	8	22	12	7	6	3	14	11	29	12	6	214
Between 5 and 9—																	
Males	2	6	6	2	6	5	3	2	5	5	2	6	2	7	2	3	64
Females	6		6	2	1	2	2	3	1	8	1	4	7	2	1	3	48
Between 10 and 14—																	
Males	6	1	5	1	2	5	4	4	2	1	1	5	2	7	2	4	62
Females	4		4	1	4	3	4	2	2	1		1	1	7		3	37
Between 15 and 19—																	
Males	6		5	5	5	4	7	6	6			1	3	6	1	4	58
Females	5	2	7		4	3	3	4	2	5	3	4	11	14	1	3	71
Between 20 and 24—																	
Males	8	7	6	5	6	1	6	5	3	5	5	2	8	5	2	5	79
Females	7	2	7	3	6	5	3	9	5	6	4	7	10	13	1	9	99
Between 25 and 29—																	
Males	7	3	9	6	7	3	7	6	9	8	6	7	7	12	1	7	110
Females	7	3	15	2	3	6	6	7	3	4	9	10	16	9	3	6	123

GENERAL TABLE NO. 1. 1920—Continued

Deaths from all causes, not including non resident or unknown deaths, by wards, age and sex, including deaths in City Hospital and the Sanatoriums at Soho and Verona, New Jersey

AGES	WARDS																Total
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	15th	16th	
Between 30 and 34—																	
Males	6	7	12	12	16	3	7	9	5	5	3	2	10	11	4	7	120
Females	10	7	18	1	4	3	6	12	12	11	3	8	6	9	2	4	108
Between 35 and 39																	
Males	4	14	11	11	7	3	6	7	6	8	6	5	8	9	5	6	116
Females	7	6	8	6	2	5	4	8	11	7	7	4	6	6	8	10	107
Between 40 and 44—																	
Males	6	10	10	8	6	10	4	10	14	11	6	5	12	11	6	15	136
Females	6		10	4	6	6	3	9	7	3	9	4	8	11	6	8	102
Between 45 and 49—																	
Males	9	14	14	8	13	12	10	9	15	16	6	12	8	9	4	13	168
Females	6	9	9	7	3	1	5	8	5	7	7	7	10	11	8	10	106
Between 50 and 54—																	
Males	10	8	20	16	10	5	8	13	11	8	8	9	22	18	6	9	179
Females	15	7	13		7	11	15	14	13	8	9	4	13	16	3	11	159
Between 55 and 59—																	
Males	8	11	12	15	14	9	8	11	16	10	10	16	14	19	6	14	194
Females	6	8	10	5	10	3	2	8	5	4	17	9	16	11	5	9	121
Between 60 and 64—																	
Males	18	15	11	16	7	12	4	10	20	6	17	5	15	16	10	14	166
Females	7	6	17	4	10	9	10	17	19	10	11	7	17	11	6	12	173

GENERAL TABLE NO. 1, 1910—Continued

Deaths from various causes, including non-resident or unknown deaths by wards, age and sex, including deaths in City Hospital and the Sanatoriums at Soho and Verona, New Jersey

AGES	WARDS																Total
	1st	2d	3d	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	15th	16th	
Between 67 and 70—																	
Males	7	7	3	8	9	9	5	15	11	7	10	5	13	12	9	11	148
Females	6	7	9	5	13	11	12	19	19	4	4	4	16	8	9	16	160
Between 71 and 74—																	
Males	7	9	14	4	9	7	5	18	12	7	11	3	8	13	7	7	181
Females	8	8	13	4	6	20	7	17	11	6	23	8	12	6	2	8	154
Between 75 and 79—																	
Males	8	5	8	8	1	6	4	7	11	1	5	6	17	4	3	9	89
Females	3	13	10	7	5	7	6	18	12	5	15	5	11	4	10	5	136
Between 80 and 84—																	
Males	2	3	1	3	3	5	—	8	5	1	3	—	6	2	—	5	42
Females	9	5	5	4	4	4	4	7	10	1	8	2	8	4	6	10	85
Between 85 and 89—																	
Males	1	3	2	2	—	2	2	2	2	3	6	1	4	2	—	2	33
Females	2	4	1	3	2	4	2	4	5	3	6	—	3	2	1	7	49
Ninety and over—																	
Males	—	—	—	—	1	—	1	—	1	—	1	—	2	—	—	1	7
Females	2	—	1	1	2	1	—	4	4	1	3	—	1	2	1	5	28
TOTALS	70	79	49	78	74	76	97	90	83	34	79	28	48	42	18	24	5,210
Males	6	2	8	14	6	12	14	17	20	17	36	15	32	23	9	169	2,711
Females	64	77	41	64	68	64	83	73	63	17	43	13	16	19	9	155	2,499

MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR.

CAUSES	Yellow	Colored	White	Total	Males	Females	Under 1 Year	1 and 4 Years	2 and 5 Years	Under 10 Years	10 to 24	25 to 44	45 to 64	65 and Over
Total, All Causes	28	342	370	712	391	321	106	23	11	150	18	26	52	79
Infantile Paralysis		1	1	2	1	1	1			1				
Typhoid Fever														
Malaria														
Scarlet Fever			13	13	6	7	4			13				
Whooping Cough	1	2	3	6	1	5	2	1		3				
Diphtheria		7	7	14	8	6	1	5	1	7				
Epidemic Meningitis (Cerebro Spinal)	2	11	13	26	5	21	1			1	3	4	3	
Other Epidemic Diseases		1	1	2		2				1				
Tuberculosis of Lungs (Consumption)	4	27	31	58	28	30	1			2	9	9	10	1
Other Tuberculosis		5	5	10	5	5				3	2			
Cancer, Malignant Tumor		10	10	20	8	12	1			1	1	1		
Simple Meningitis		4	4	8	3	5	1	1		2	2	3	6	1
Apoplexy Softening of the Brain		16	15	31	8	23								
Organic Heart Disease		32	32	64	13	51				4	1	3	5	9
Bronchitis	1	12	13	26	9	17	8			8			15	9
Pneumonia, Lobar	2	33	35	68	19	49	2	7	2	11	2	10	10	2
Pneumonia, Broncho	4	25	29	54	18	36	12	5	5	22	1	1	2	3
Other Respiratory Diseases		3	3	6	2	4								
Diseases of Stomach and Intestines excepted														
Heart and Diseases of the Heart	4	24	28	52	16	36	2	2		28				
Appendicitis and Typhlitis	1	2	3	6	2	4				1			1	1
Hernia Intestinal Obstruction														
Cirrhosis of Liver		8	8	16	3	13								
Bright's Disease and Nephritis	1	13	14	29	6	23	1	1		2	1	3	1	3
Diseases of Women (not Cancer)													6	2
Puerperal Septicemia		1	1	2		2								
Other Puerperal Diseases		5	5	10		10								
Congenital Debility and Malformation		34	38	72	23	49	33			38		5		
Old Age		2	2	4	1	3								
Accident		12	12	24	7	17	2			2	4	2	3	2
Homicide		1	1	2	1	1								
Suicide	1	2	3	6	2	4								
Undefined Causes											1		2	
All Other Causes	2	40	42	84	24	60	5	1	2	8	4	4	7	9
Totals for 1920	30	372	402	772	391	381	89	25	24	142	31	25	80	62

The death rate for the First Ward was 12.3 per 1,000 of population. The ward population is estimated for these calculations at 30,008.

SECOND WARD, 1920
MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR

220

DEPARTMENT OF PUBLIC AFFAIRS

CAUSES	White	Colored	White	Total	Males	Females	Under 1 Year	1 and 2 and Under	Under 5	5 to 15	15 to 25	25 to 45	45 to 65	65 and Over	
Total	1	49	296	296	152	104	39	7	2	47	6	11	61	67	64
Infantile Pneumonia		1		1		1		1		1					
Measles															
Scarlet Fever			2	2	1	1		1	1	2					
Whooping Cough			1	1	1		1			1					
Diphtheria															
Epidemic Meningitis (Cerebro Spinal)		1	4	5	3	2						3	2		
Other Epidemic Diseases			1	1		1	1			1					
Tuberculosis of Lungs (Consumption)		10	17	27	21	6				1		14	8	3	
Tuberculous Meningitis			1	1	1						1				
Other Tuberculosis		1													
Cancer, Malignant Tumor			10	10	5	5						1	5	4	
Simple Meningitis			1	1	1					1					
Apoplexy, Softening of the Brain		2	21	23	9	14						2	8	1	
Organic Heart Disease		4	19	23	8	15	1		1	1	3	4	7	7	
Bronchitis		2	2	2	1	1	1			1		1			
Pneumonia, Lobar		1	6	23	30	20	10	2		4	1	16	6	2	
Pneumonia, Broncho			9	9	9		2	1		4			3	2	
Other Respiratory Diseases		2	4	6	4	2	1			1		1	1	3	
Diseases of Stomach (Cancer excepted)		1	2	3	1	2						1	1	1	
Diseases of Intestines			6	6	1	5				6					
Appendicitis															
Bernard's Disease of Intestines															
Diseases of Liver			2	2	2								1	1	
Bright's Disease of Nephritis			24	24	19	5				2		1	11	16	
Diseases of Women															
Puerperal Septicemia			2	2		2				1	1				
Other Puerperal Diseases															
Congenital Debility and Malformation		2	18	20	9	11	20			20					
Old Age			2	2	1	1									2
Accident		12	14	16	11	5		3		4	1	9	2	1	
Homicide		2	2	4	3	1									
Suicide			5	5	4	1									
Undefined Causes															
All Other Causes		6	21	27	14	13	1								

Total for 1920: 104 males, 114 females, 38 under 1 year, 44 1 and 2 years, 17 5 to 15 years, 62 15 to 25 years, 69 25 to 45 years, 64 45 to 65 years, 64 65 and over.

CAUSES	Age below 10	Colored	White	Total deaths	Males	Females	Under 5 Year	Under 1 year	Under 1 year	Under 5 Years	5 to 14	15 to 24	25 to 44	45 to 64	65 and over
Total All Causes	1	80	358	438	217	221	81	4	99	101	90	25	101	106	66
Infantile Paralysis															
Typhoid Fever															
Malaria															
Stomach															
Meningitis															
Kidney															
Wound															
Diabetes															
Infantile															
Female Malignant															
Other Epidemic Diseases															
Cholera															
Infantile Malignant															
Other Epidemic Diseases															
Cancer, Malignant															
Simple Meningitis															
Apoplexy															
Other Epidemic Diseases															
Cholera															
Infantile															
Other Epidemic Diseases															
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Infantile															
Other Epidemic Diseases															

The death rate in the Third World was 12.4 per 1,000 of population. The world population is estimated for these calculations at 35,343.

FOURTH WARD, 1920

TABLE A. DEATHS FROM ALL CAUSES OF DEATH BY SEX, AGE AND COLOR

CAUSE	White	Colored	Both	Total	Males	Females	Under 1 Year	1 and Under 2	2 and Under 5	Under 5 Years	5 to 14	15 to 24	25 to 44	45 to 64	65 and Over
All Causes	4	32	162	238	144	84	31		6	47	6	13	47	71	44
Infantile Paralysis															
Typhoid Fever			1	1	1							1			
Scarlet Fever															
Whooping Cough			1	1		1							1		
Diphtheria			5	5	3	2			1	6					
Flu			3	3		3	1								
Epidemic Meningitis (Cerebro Spinal)										1			1		1
Other Epidemic Diseases															
Tuberculosis of Lungs (Consumption)				27	24	3						2	11	13	
Tuberculosis Meningitis			1	1		1		1		1					
Other Tuberculosis		1	1	2	2									1	1
Cancer Malignant Tumor		1	12	14	8	6						1	2	6	
Simple Meningitis		1						1		1					
Apoplexy Softening of the Brain	1		9	10	3	7									
Organic Heart Disease		5	14	19	10	9					2		1	3	6
Bronchitis		1	7	8	4	4		1		1			2	3	6
Pneumonia, Lobar		2	25	27	13	14	1	2	2	5		5	6	9	6
Pneumonia Broncho		1	7	8	5	3	2	1	1	4	1		1	1	2
Other Respiratory Diseases		1	3	4	3	1							1	1	2
Diseases of Stomach (Cancer excepted)		1		1	1									1	1
Typhoid Fever (under 1 year)		2	5	7	4	3	7			7					
Appendicitis and Typhitis															
Hernia Intestinal Obstruction			1	1		1									
Cirrhosis of Liver		1	7	8											1
Bright's Disease and Nephritis		3	14	17	13	4			1	1		1	1	6	4
Diseases of Women (not Cancer)															
Puerperal, Septic															
Other Puerperal Diseases		1	1	2	1	1						1			
Congestive Dropsy (M. C. F.)			11	11	6	5	3			15					
M. C. F.			24	24	21	3	1			1	2	1	15	7	6
M. C. F. (M. C. F.)															
M. C. F. (M. C. F.)			1	1	1									1	
All Other Causes	1	4	38	43	24	19									

Totals for 1919

The death rate in the Fourth Ward was 18.3 per 100 of population. The ward population is estimated for these calculations at 12,449.

MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR

DISEASE	All Ages	Males	Females	Under 1 Year	1 to 4 Years	5 to 14 Years	15 to 24 Years	25 to 44 Years	45 to 64 Years	65 and Over			
Total, All Causes	99	33	193	141	79	99	13	114	13	20	52	79	89
Infantile Paratyphoid	1	1	1	1	1	1	1	1	1	1	1	1	1
Typhoid Fever	1	1	1	1	1	1	1	1	1	1	1	1	1
Malaria	1	1	1	1	1	1	1	1	1	1	1	1	1
Scarlet Fever	1	1	1	1	1	1	1	1	1	1	1	1	1
Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
Whooping Cough	1	1	1	1	1	1	1	1	1	1	1	1	1
Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1
Scarlet Fever	1	1	1	1	1	1	1	1	1	1	1	1	1
Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
Whooping Cough	1	1	1	1	1	1	1	1	1	1	1	1	1
Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1
Scarlet Fever	1	1	1	1	1	1	1	1	1	1	1	1	1
Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
Whooping Cough	1	1	1	1	1	1	1	1	1	1	1	1	1
Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1
Scarlet Fever	1	1	1	1	1	1	1	1	1	1	1	1	1
Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
Whooping Cough	1	1	1	1	1	1	1	1	1	1	1	1	1
Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1
Scarlet Fever	1	1	1	1	1	1	1	1	1	1	1	1	1
Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
Whooping Cough	1	1	1	1	1	1	1	1	1	1	1	1	1
Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1
Scarlet Fever	1	1	1	1	1	1	1	1	1	1	1	1	1
Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
Whooping Cough	1	1	1	1	1	1	1	1	1	1	1	1	1
Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1
Scarlet Fever	1	1	1	1	1	1	1	1	1	1	1	1	1
Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
Whooping Cough	1	1	1	1	1	1	1	1	1	1	1	1	1
Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1
Scarlet Fever	1	1	1	1	1	1	1	1	1	1	1	1	1
Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
Whooping Cough	1	1	1	1	1	1	1	1	1	1	1	1	1
Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1
Scarlet Fever	1	1	1	1	1	1	1	1	1	1	1	1	1
Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
Whooping Cough	1	1	1	1	1	1	1	1	1	1	1	1	1
Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1
Scarlet Fever	1	1	1	1	1	1	1	1	1	1	1	1	1
Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
Whooping Cough	1	1	1	1	1	1	1	1	1	1	1	1	1
Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1
Scarlet Fever	1	1	1	1	1	1	1	1	1	1	1	1	1
Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
Whooping Cough	1	1	1	1	1	1	1	1	1	1	1	1	1
Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1
Scarlet Fever	1	1	1	1	1	1	1	1	1	1	1	1	1
Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
Whooping Cough	1	1	1	1	1	1	1	1	1	1	1	1	1
Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1
Scarlet Fever	1	1	1	1	1	1	1	1	1	1	1	1	1
Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
Whooping Cough	1	1	1	1	1	1	1	1	1	1	1	1	1
Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1
Scarlet Fever	1	1	1	1	1	1	1	1	1	1	1	1	1
Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
Whooping Cough	1	1	1	1	1	1	1	1	1	1	1	1	1
Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1
Scarlet Fever	1	1	1	1	1	1	1	1	1	1	1	1	1
Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
Whooping Cough	1	1	1	1	1	1	1	1	1	1	1	1	1
Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1
Scarlet Fever	1	1	1	1	1	1	1	1	1	1	1	1	1
Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
Whooping Cough	1	1	1	1	1	1	1	1	1	1	1	1	1
Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1
Scarlet Fever	1	1	1	1	1	1	1	1	1	1	1	1	1
Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
Whooping Cough	1	1	1	1	1	1	1	1	1	1	1	1	1
Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1
Scarlet Fever	1	1	1	1	1	1	1	1	1	1	1	1	1
Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
Whooping Cough	1	1	1	1	1	1	1	1	1	1	1	1	1
Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1
Scarlet Fever	1	1	1	1	1	1	1	1	1	1	1	1	1
Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
Whooping Cough	1	1	1	1	1	1	1	1	1	1	1	1	1
Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1
Scarlet Fever	1	1	1	1	1	1	1	1	1	1	1	1	1
Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
Whooping Cough	1	1	1	1	1	1	1	1	1	1	1	1	1
Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1
Scarlet Fever	1	1	1	1	1	1	1	1	1	1	1	1	1
Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
Whooping Cough	1	1	1	1	1	1	1	1	1	1	1	1	1
Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1
Scarlet Fever	1	1	1	1	1	1	1	1	1	1	1	1	1
Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
Whooping Cough	1	1	1	1	1	1	1	1	1	1	1	1	1
Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1
Scarlet Fever	1	1	1	1	1	1	1	1	1	1	1	1	1
Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
Whooping Cough	1	1	1	1	1	1	1	1	1	1	1	1	1
Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1
Scarlet Fever	1	1	1	1	1	1	1	1	1	1	1	1	1
Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
Whooping Cough	1	1	1	1	1	1	1	1	1	1	1	1	1
Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1
Scarlet Fever	1	1	1	1	1	1	1	1	1	1	1	1	1
Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
Whooping Cough	1	1	1	1	1	1	1	1	1	1	1	1	1
Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1
Scarlet Fever	1	1	1	1	1	1	1	1	1	1	1	1	1
Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
Whooping Cough	1	1	1	1	1	1	1	1	1	1	1	1	1
Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1
Scarlet Fever	1	1	1	1	1	1	1	1	1	1	1	1	1
Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
Whooping Cough	1	1	1	1	1	1	1	1	1	1	1	1	1
Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1
Scarlet Fever	1	1	1	1	1	1	1	1	1	1	1	1	1
Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
Whooping Cough	1	1	1	1	1	1	1	1	1	1	1	1	1
Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1
Scarlet Fever	1	1	1	1	1	1	1	1	1	1	1	1	1
Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
Whooping Cough	1	1	1	1	1	1	1	1	1	1	1	1	1
Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1
Scarlet Fever	1	1	1	1	1	1	1	1	1	1	1	1	1
Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
Whooping Cough	1	1	1	1	1	1	1	1	1	1	1	1	1
Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1
Scarlet Fever	1	1	1	1	1	1	1	1	1	1	1	1	1
Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
Whooping Cough	1	1	1	1	1	1	1	1	1	1	1	1	1
Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1
Scarlet Fever	1	1	1	1	1	1	1	1	1	1	1	1	1
Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
Whooping Cough	1	1	1	1	1	1	1	1	1	1	1	1	1
Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1
Scarlet Fever	1	1	1	1	1	1	1	1	1	1	1	1	1
Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
Whooping Cough	1	1	1	1	1	1	1	1	1	1	1	1	1
Diphtheria	1	1	1	1	1	1	1	1	1	1	1		

* Ward 11 was 160 per 1,000 of population. The ward population is estimated for these calculations.

SIXTH WARD, 1920

MORTALITY BY CAUSE OF DEATH BY SEX, AGE, AND COLOR

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DEPARTMENT OF PUBLIC AFFAIRS

CAUSES	Yellow	Colored	White	Total	Males	Females	Under 1 Year	1 and Under 5	2 and Under 5	Under 15	15 to 24	25 to 44	45 to 64	65 and over	
Total, All Causes		11	245	256	125	131	38	7	6	1	14	53	64	76	
Infantile Paralysis															
Typhoid Fever															
Malaria															
Smallpox															
Measles			1	1	1				1	1					
Scarlet Fever															
Diphtheria			1	1		1				1					
Influenza		1	2	3	2	1		1		1					
Other Acute Infectious Diseases												5	1	2	
Tuberculous Meningitis			1	1		1			4	1	5	13	10	1	
Other Tuberculosis		1	4	5	2	3		1	1	1	2				
Cancer, Malignant Tumor			2	2		2			1						
Stroke, Apoplexy			2	2		2	1			2			11	10	
Apoplexy, Softening of the Brain		1	14	15	2	13						1	5	9	
Organic Heart Disease			1	1	1	1				2	1	4	3	11	
Pneumonia, Lobar		1	6	7	3	4	2	1	1	3	1	4	2	1	
Pneumonia, Broncho			10	11	6	5				2		4	2	2	
Other Respiratory Diseases			6	6	4	2	2			1				1	
Diseases of Stomach (Cancer excepted)		1	5	6	4	2	2			3				2	
Diarrhoeal Diseases (under 5 years)			1	1		1						3			
Acute Infectious Diseases			1	1	1					4					
Heart Disease, Coronary											1				
Cerebrovascular Disease											1				
Bright's Disease, Nephritis															
Diseases of Women (not Cancer)			2	2	1	1				1	1	2	1	10	
Puerperal Septicemia															
Other Puerperal Diseases			2	2		2						2			
Congenital Debility and Malformation		1	22	23	14	9				3					
Accident			1	1		1									
Botulism			1	1						1	3	1	1	3	
Scald															
Unlabeled Diseases					1	1							1	1	
All Other Causes											1	1	7	11	
Totals for 1919		5	226	231	115	116	24		4	31	6	6	46	66	78

The death rate for the Sixth Ward was 12.6 per 1,000 of population. The ward population is estimated for these calculations at 29,323.

SEVENTH WARD, 1920
MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR

CAUSES	Yel low	Col ored	White	Total Deaths	Males	Females	Under 1 Year	1 and Under	2 and Under	5 Years	to 4	5 to 24	25 to 44	45 to 64	65 and Over
Total, All Causes		68	284	287	134	153	55	23	19	98	13	93	44	60	49
Infantile Paralysis															
Typhoid Fever															
Malaria															
Smallpox															
Measles		1	4	5	2	3	2	2	1	5					
Scarlet Fever															
Whooping Cough			2	2	1	1	1	1		2					
Epidemic			3	3	2	1	1		2	4					
Diphtheria		2	11	13	8	5	1	1	1	3		3	3	1	1
Epidemic Meningitis (Cerebro Spinal)			1	1	1								1		
Other Epidemic Diseases															
Leucosis of Lungs (Consumption)		11	17	28	12	16	1			1	3	10	10	4	1
Leucosis of Lungs (Non-tuberculous)		1	2	3	1	2			2	3	1				
Other Lung Diseases			1	1		1		1		1					
Chronic Bronchitis		2	9	11	6	5							2	7	2
Simple Pneumonia		1	1	2	2			1		1	1				
Apyrexial Softening of the Brain		1	15	16	8	13								6	10
Septic Heart Disease		4	15	19	10	9	1		1	2				8	7
Myocarditis		2	1	3	1	2	2			2	1				
Pericarditis		8	24	32	17	15	5	3	3	11	1	3	8	4	5
Coronary Artery Disease		4	15	19	7	12	3	10	1	14		1	1	1	2
Other Respiratory Diseases			5	5		5	1			1			3	1	
Diseases of Stomach and Intestines			2	2	1	1	1			1				1	
Leucemia (Blood Cancer)		1	19	20	8	12	11	4	5	20					
Myeloid Leukemia			1	1	1						1				
Leucemia of the Blood															
Cirrhosis of Liver			2	2	1	1									2
Bright's Disease and Nephritis		4	21	25	12	13					2		4	10	4
Diseases of Women (not Cancer)															
Puerperal Septicemia															
Other Puerperal Diseases			1	1		1							1		
Abortion (not Puerperal)		2	19	21	9	12	2			2					
Old Age			2	2	1	1									2
Accident		3	8	11	9	2		1	1	1		4	3	3	
Homicide															
Suicide			2	2	2									2	
Undefined Causes															
All Other Causes			31	37	18	19	5		2	7	4	2	6	17	7
Total for 1920		43	214	257	138	119	47	7	8	62	12	21	64	4	17

The death rate for the Seventh Ward was 16.7 per 1,000 of population. The ward population is estimated for these calculations at 17,101.

EIGHTH WARD, 1920
MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR

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DEPARTMENT OF PUBLIC AFFAIRS

CAUSES	Age	Color	White	Total	Males	Females	Under 1 Year	1 and 2 Under	2 and 3 Under	Under 4 Years	5 to 14	15 to 24	25 to 44	45 to 64	65 and Over
Total, All Causes		19	347	368	173	196	43	17	6	66	12	20	70	88	110
Infantile Paralysis															
Typhoid Fever															
Malaria															
Scarlet Fever															
Measles			1	1	1			1		1					
Scarlet Fever									1	2					
Whooping Cough			2	2	1	1	1		2	3		1			
Diphtheria			6	6	2	4	1								
Flu		1	15	19	9	10	1	1		2	1		8	2	6
Epidemic Meningitis (Cerebro Spinal)															
Other Epidemic Diseases															
Tuberculosis of Lungs (Consumption)			28	29	14	15					1	5	15	6	2
Tuberculosis of Other Organs		1	6	7	5	2	3	3	1	7					
Other Tuberculosis		2		2	2		1			1					
Cancer, Malignant Tumor		1	25	26	14	12								13	11
Suppurative Meningitis			2	2	2		1			1					
Apoplexy, Stenosing of the Brain			27	27	8	19								5	16
Coronary Heart Disease		1	42	43	23	20	2			9	2	4	5	12	18
Pericarditis			1	1	1	1									1
Pneumonia, Lobar		1	26	27	12	15		2		2	1	3	9	10	2
Pneumonia, Broncho		2	11	13	4	9	3	4		7	1	1	1	2	1
Other Respiratory Diseases			4	4	2	2				1				1	1
Diseases of Stomach (Cancer excepted)			4	4	1	3								2	1
Diseases of Intestines (under 5 years)		1	10	11	8	3	6	5		11					
Acute Appendicitis			4	4	3	1					1	1		2	
Chronic Appendicitis			4	4	1	3								2	1
Enteritis			2	2	2									1	1
Acute Disease of the Liver		2	36	37	15	22						1	6	13	17
Diseases of the Gallbladder			1	1		1								1	
Pancreatic Disease															
Diseases of the Kidneys			2	2		2							2		
Congenital Defects of the Male		1	19	20	11	9	20			20					
Old Age			3	6	1	2									3
Infants			17	17	12	5					1	9	5	5	4
Stillborn															
Unidentified Causes															
All Other Causes		5	47	52	20	32	4	1	2	7	1	2	7	11	24
			62	64	29	35	48			27	17	21	22	68	14

The death rate for the Eighth Ward was 11.7 per 1,000 of population. The ward population is estimated for these calculations at 31,963.

NINTH WARD, 1920
MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX AGE AND COLOR

CAUSES	10 to 14	15 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65 and Over
Total All Causes	21	30	383	205	178	67	
Infantile Paralysis							
Typhoid Fever		1	1	1			
Malaria							
S. S. Pox							
Measles		1	1	1			
Scarlet Fever		2	2	1	1		
Whooping Cough		1	1	1			
Diphtheria		2	2	1	1		
Influenza	3	14	2	7	14		
Epidemic Meningitis (Cerebro Spinal)							
Other Epidemic Diseases							
Tuberculosis of Internal Organs	1	14	15	11	4		
Tuberculous Meningitis		1	1	3			
Other Tuberculosis	1	3	4	4			
Cancer, Malignant Tumors		57	37	19	18		
Simple Meningitis		4	4	2	2		
Apoplexy, Softening of the Brain	1	24	25	13	12		
Organic Heart Disease	2	36	38	17	21		
Stroke		4	4	1	3		
Pneumonia, Lobar	1	22	23	12	11		
Pneumonia, Broncho	1	17	18	10	6		
Other Respiratory Diseases		4	5	3	2		
Diseases of Stomach (Cancer excepted)		5	5	1	4		
Diarrhoeal Diseases (under 5 years)		8	9	5	4		
Appendicitis and Typhitis	1	3	3	3			
Hernia, Intestinal Obstruction		6	7	3	4		
Cirrhosis of Liver	1	2	2	1	1		
Bright's Disease and Nephritis		34	36	18	18		
Diseases of Women (not Cancer)							
Puerperal Septicaemia		1	1				
Other Puerperal Diseases		3	3				
Cancer of Uterus and Vagina, etc.	4	29	23	25	8		
Old Age		4	4	2	2		
Accident	1	18	19	14	5		
Homicide							
Struck		6	3	2	1		
Undefined Causes	1		1				
All Other Causes	3	50	55	36	29		
Totals for 1919	24	37	400	210	199	43	

The death rate for the Ninth Ward was 11.1 per 1,000 of population. The ward population is estimated for these calculations at 34,539.

TENTH WARD, 1920
MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR

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DEPARTMENT OF PUBLIC AFFAIRS

CAUSES	White	Colored	Total	Males	Females	Under 1 Year	1 and Under 5	5 and Under 15	15 to 24	25 to 44	45 to 64	65 and over
Total All Causes	346	174	520	172	348	96	81	19	146	15	16	67
Infantile Paralysis												
Typhoid Fever												
Malaria												
Scarlet Fever												
Whooping Cough												
Diphtheria												
Measles (Cerebro Spinal)												
Other Epidemic Diseases												
Tuberculosis of Lungs (Consumption)												
Tuberculosis Menstrual												
Cancer Tuberculosis												
Cancer, Malignant Tumor												
Simple Meningitis												
Apoplexy Softening of the Brain												
Organic Heart Disease												
Bronchitis												
Pneumonia												
Other Acute Diseases												
Diseases of Stomach (Cancer excepted)												
Diseases of Intestines (under 5 years)												
Appendicitis and Typhoid												
Hernia, Intestinal Obstruction												
Cirrhosis of Liver												
Bright's Disease and Nephritis												
Diseases of Women (not Cancer)												
Puerperal Septicemia												
Other Puerperal Diseases												
Congenital Deformity and Malformation												
Age												
Sex												
Color												
Total												

The death rate for the Tenth Ward was 17.1 per 1,000 of population. The ward population is estimated for these calculations at 22,753.

ELEVENTH WARD 1919
MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX AGE AND COLOR

CAUSES	White	Colored	White	Colored	Total	Males	Females	Under 1 Year	1 and Under 2	2 and Under 5	Under 15 Years	15 to 64	65 to 74	75 to 84	85 and Over
Total All Causes	14	276	290	136	254	29	3	3	35	4	12	14	87	103	
Infectious Diseases															
Typhoid Fever															
Malaria															
Scarlet Fever			1	1	1	1			1						
Whooping Cough			1	1	1	1			1						
Diphtheria															
Influenza			13	13	5	8			1						
Measles															
Other Infectious Diseases															
Pulmonary Tuberculosis			23	23	11	12									
Other Tuberculosis			1	1	1	1									
Chronic Bronchitis															
Chronic Nephritis			30	30	7	23									
Arteriosclerosis of the Brain			23	23	7	16									
Organic Heart Disease			3	3	3	3									
Recklessness			4	4	4	4									
Pneumonia			13	13	7	6									
Pneumonia			16	16	7	9									
Other Respiratory Diseases			6	6	4	2									
Diseases of Stomach and Intestines			5	5	3	2									
Diarrhoea			4	4	2	2									
All other Diseases			1	1	1	1									
Intestinal Obstruction			1	1	1	1									
Diseases of Liver			1	1	1	1									
Diseases of Kidneys			40	40	10	30									
Diseases of Women and Children															
Perinatal Mortality			2	2	2	2									
Other Puerperal Diseases			1	1	1	1									
Congenital Debility and Malformation			14	14	10	4									
Old Age			5	5	5	5									
Accident			4	4	4	4									
Homicide															
Self-slaughter			4	4	4	4									
Ill-defined Causes															
All Other Causes			1	1	1	1									
Total for 1919	17	275	292	136	254	36	3	3	41	4	12	14	87	103	

The death rate for the Eleventh Ward was 13.9 per 1,000 of population. The ward population is estimated for these calculations at 20,800.

THIRTEENTH WARD 192
MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR

CAUSES	Age Color	White	Total	Males	Females	Under 1 Year	1 and Under	2 and Under	3 Years	5 to 4	15 to 24	25 to 44	45 to 64	65 and Over
Total, All Causes	5	408	408	202	206	60	12	12	8	10	28	79	113	97
Infantile Paralysis		1	1	1	—	—	—	—	—	—	—	—	—	—
Typhoid Fever		4	4	2	2	—	—	—	1	—	—	—	—	—
Malaria		—	—	—	—	—	—	—	—	—	—	—	—	—
Scarlet Fever		—	—	—	—	—	—	—	—	—	—	—	—	—
Measles		1	1	1	—	1	—	—	—	—	—	—	—	—
Whooping Cough	2	2	4	2	2	2	1	1	—	—	—	—	—	—
Diphtheria		1	1	1	—	—	—	—	—	—	—	—	—	—
Influenza		18	18	9	9	1	—	1	2	—	—	12	3	—
Epidemic Meningitis (Cerebro Spinal)		—	—	—	—	—	—	—	—	—	—	—	—	—
Other Epidemic Diseases		—	—	—	—	—	—	—	—	—	—	—	—	—
Tuberculosis (all forms)		23	34	17	17	—	—	—	—	7	19	6	—	—
Other Tuberculosis		1	1	1	—	—	—	—	—	—	—	—	—	—
Cancer, Malignant Tumor		4	4	1	3	—	—	—	—	—	—	—	—	—
Simple Meningitis		29	39	8	31	—	—	—	—	3	—	—	—	—
Alcohol, Softening of the Brain		3	3	1	2	1	1	—	2	—	—	—	—	—
Organic Heart Disease		29	35	14	21	—	—	—	—	—	—	—	—	—
Bronchitis		35	35	19	16	—	—	—	—	—	—	—	—	—
Pneumonia, Lobar		5	5	3	2	4	—	—	—	—	—	—	—	—
Pneumonia, Broncho		20	30	14	16	—	1	2	4	—	—	—	—	—
Other Respiratory Diseases		22	28	12	16	10	1	1	12	—	—	—	—	—
Diseases of Stomach (Cancer excepted)		7	7	1	6	—	—	—	—	—	—	—	—	—
Diarrhoea Diseases (under 5 years)		2	2	—	—	1	—	—	—	—	—	—	—	—
Acute (small Intestine)		11	11	10	1	7	1	2	11	—	—	—	—	—
Hernia, Intestine, Obstruction		6	6	3	3	—	—	—	—	—	—	—	—	—
Cirrhosis of Liver		3	3	1	2	—	—	—	—	—	—	—	—	—
Bright's Disease and Nephritis		5	5	4	1	—	—	—	—	—	—	—	—	—
Diseases of Women (not Cancer)		38	38	18	20	—	1	—	1	1	—	7	15	14
Pharynx, Septicemia		—	—	—	—	—	—	—	—	—	—	—	—	—
Other Pyrexial Diseases		4	4	—	4	—	—	—	—	—	—	—	—	—
Congenital Debility and Malformation		2	2	1	1	—	—	—	—	—	—	—	—	—
Old Age		29	29	17	12	29	—	—	29	—	—	—	—	—
Accident		2	2	1	1	—	—	—	—	—	—	—	—	—
Homicide		11	11	7	4	—	1	1	2	5	1	1	—	—
Suicide		2	2	—	2	1	—	—	—	—	—	—	—	—
Unlabeled Causes		6	6	5	1	—	—	—	—	—	—	—	—	—
All Other Causes		1	46	27	20	2	2	—	4	1	5	6	15	16
Totals for 1919		4	408	202	206	60	—	—	77	26	29	99	130	70

The death rate for the Thirteenth Ward was 1.8 per 1,000 of population calculations at 35,384

The ward population is estimated for these

FOURTEENTH WARD, 1920
MORTALITY FROM URIN TRAIL CAUSES, CLASSIFIED BY SEX, AGE AND COLOR

CAUSES	Yel low	Co. ored	White	Total deaths	Males	Fe males	Under 1 Year	1 Under	2 and Under	Under 5 Years	5 to 14	15 to 44	45 to 64	65 and over
Total Causes		16	436	452	231	221	89	30	22	41	71	28	80	108
Pneumonia			1	1	1		1			1				
Typhoid Fever			1	1		1								
Measles														
Scarlet Fever			6	6	3	3		4	2	6				
Whooping Cough			1	1		1								
Diphtheria		1	11	11	5	6	8		4	11				
Epidemic Meningitis (Cerebro Spinal)		1	4	5	5		1	2	1	4			6	
Other Epidemic Diseases			19	19	9	10	1		1	1				
Tuberculosis of Lungs (Consumption)		1	3	4	2	2						10		9
Tuberculous Meningitis			46	46	28	18								1
Other Tuberculosis			3	3	2	1	2				1			
Cancer, Malignant Tumor		1	3	4	1	2								
Epidemic Meningitis			18	19	10	9							1	
Apoplexy, Softening of the Brain			5	5	1	4	1							
Organic Heart Disease			20	20	11	9								
Bronchitis			33	33	16	17		1	2	5		3	4	
Pneumonia, Lobar		4	5	6	3	2	3							
Pneumonia, Broncho			45	49	24	25	6	5		11		4		1
Other Respiratory Diseases		1	22	23	9	14	9	5	1	8		2		
Diseases of Stomach (Cancer excepted)			8	8	6	3	2	1		5		1		3
Diarrhoeal Diseases (under 5 years)			5	5	2	3							2	
Appendicitis and Abscess			24	24	13	11	10	7		14				
Hepatitis and Stricture			4	4	1	3				1	1			
Hepatitis and Stricture			1	1		1				1				
Gonorrhea			2	2	2									
Bright's Disease and Nephritis			27	29	13	16					1		0	1
Diseases of Women (not Cancer)				1		1								
Eclampsia				2		2								
Other Epidemic Diseases				2		2								
Chorea, Stiffness and Malformation		3	31	34	21	13	11							
Old Age			2	2		2								2
Accidents			18	18	11	7			2	8	1	7		1
Suicide			6	6	4	2						2	1	1
Unlabeled Causes														
All Other Diseases		1	54	55	28	31				8		6	8	22
Totals for 1919		1	472	473	248	225	85	31	22	42	72	28	81	110

The death rate for the Fourteenth Ward was 12.7 per 1,000 of population. The death rate for the city was 11.4 per 1,000 of population.

MORTALITY BY PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR

CAUSES	Ye low	Co. ored	White	Total deaths	Males	Fe- males	Under 1 Year	and Under 2	2 and Under 5	Under 5 years	5 to 14	15 to 24	25 to 44	45 to 64	65 and Over
Total All Causes		24	159	183	90	93	9	13	8	1	5	6	37	43	5
Infantile Paralysis				1	1										
Typhoid Fever															
Malaria															
Scalping															
Measles			1		1			1		1					
Scarlet Fever															
Whooping Cough															
Diphtheria			2	2	1	1		1		1					
Influenza		2	4	6	4	2									
Epidemic Meningitis (Cerebro Spinal)												1	2	1	2
Other Epidemic Diseases															
Tuberculosis of Lungs (Consumption)		2	15	17	11	6					1	2	9	4	1
Tuberculous Meningitis															
Other Tuberculosis															
Cancer, Malignant Tumor		1	18	19	8	11							4	7	3
Simple Meningitis			1	1		1			1	1					
Apoplexy, Softening of the Brain		1	10	11	7	4							1	3	7
Organic Heart Disease		2	12	14	7	7									
Pneumonia		2	2	4	1	3		2		2	1		2	5	6
Pneumonia, Lobar		7	14	21	12	9	3	2		5					1
Pneumonia, Broncho		1	8	9	4	5	1	5		8		1	8	4	3
Other Respiratory Diseases			2	2	1	1									
Diseases of Stomach (Cancer excepted)			1	1	1		1						2		
Diarrhoeal Diseases (under 5 years)		1	10	11	6	5	7	2	2	11					
Appendicitis and Typhitis			1	1	1										
Hemorrhage of Intestinal Obstruction			2	2		2								1	
Stricture of Liver			1	1		1									
Pyelitis Disease and Nephritis		3	27	30	16	14							4	10	1
Diseases of Women (not Cancer)															
Puerperal Septicemia															
Other Puerperal Diseases			1	1		1						1			
Congenital Deformities and Malformations			5	5	1	4	5			5					
Old Age															
Accident			7	7	4	3			4	4	1		7		1
Homicide															
Suicide			1	1		1									
Undefined Causes												1			
All Other Causes		2	18	20	9	11									
Totals for 1909		31	196	227	109	117	27	10	8	45	10	22	54	49	10

The death rate for the Fifteenth Ward was 11.4 per 1,000 of population calculations at 16,010

The ward population is estimated for these

SIXTEENTH WARD, 1920

DEATHS FROM PRINCIPAL CAUSES—FEMALE BY SEX, AGE AND COLOR

	LOW	Ord	Ad	deaths	Males	Females	Under 1 Year	Under 1 and 2	3 and Under 5	Under 5 Years	5 to 14	15 to 24	25 to 44	45 to 64	65 and Over
Total All Cases	10	314	324	169	156	37	6	11	54	4	20	29	4	8	
Dysentery			1		1					1					
Cholera															
Measles			1		1										
Whooping Cough			1	1	1	1				1					
Diphtheria			8	8	7	1		1	3	4	4				
Scarlet Fever	1	14	15	7	8	1	1		2	2	2	6	2	1	
Other Epidemic Diseases															
of Lungs (Consumption)	3	16	19	13	6					2	4	5	8		
Tuberculous Meningitis		3	3	1	2				2	2	1				
Other Tuberculosis															
Simple Meningitis		2	2	2								6	9	7	
Apoplexy, Softening of the Brain		21	21	7	14							1	1	4	16
Cerebral Heart Disease		42	42	22	20	1		1	2			2	5	18	2
Protrusion	1	2	3		3	1		1	2						1
Pharyngitis, Lobar		25	25	12	13		1	1	1	1	1	15	5	4	
Pharyngitis, Broncho		15	15	7	8	4	1	1	6		2	1	6	3	
Tracheitis					2								1	1	
Ischemic Heart Disease		4	4	4		3			4						
Coronary Artery Disease			5	2	2			1	1	2			1	1	
Myocarditis			4		1										
Pericarditis			1	1											
Valvular Disease			1	1											
Other Diseases of Heart	1	20	24	11	13	1			2	2	1	4	6	4	
Diseases of Women (not Cancer)		1	1		1							1			
Puerperal Septicemia		2	2		2								2		
Other Puerperal Diseases															
Congenital Deformities and Malformation		20	20	12	8	20				20					
Other Diseases					3										
Other Diseases		13	13	11	2	1			1		2	3	5	3	
Other Diseases		1	1										1		
Other Diseases		4	4	1	3								2	1	
Other Diseases															
Other Diseases	4	45	49	26	23	4		1	5	1	2	12	14	15	
Totals for 1919	5	281	286	134	152	32	4	6	42	14	15	64	80	7	

NON RESIDENTS 1919
MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR

CAUSES	Yellow	Colored	White	Total deaths	Males	Females	Under 1 Year	Under 15 Years	Under 15 Years	15 to 24	25 to 44	45 to 64	65 and Over	
All Causes		10	297	307	168	144	31	0	43	16	6	84	79	64
Infantile Paralysis														
Typhoid Fever			1	1	1						1			
Malaria														
Smallpox														
Measles														
Scarlet Fever														
Whooping Cough														
Diphtheria														
Influenza			2	2	1	1						2		
Epidemic Meningitis (Cerebro Spinal)			2	2	1	1					1			
Other Epidemic Diseases									1					
Tuberculosis (Consumption)			4	4	1	3						1	2	1
Chronic Diseases			1	1		1								
Stroke, Myocarditis		2	24	26	14	12				1		8	10	8
Artery, Softening of the Brain			8	8	3	5				2		1		
Organic Heart Disease			12	12	6	6						1	2	10
Bronchitis			27	27	15	12				1	2	3	11	10
Pneumonia, Lobar			1	1		1						1		
Pneumonia, Broncho	1		14	15	8	7		1	1	1	1	7	3	3
Other Respiratory Diseases			11	11	7	4		1	2			5	2	1
Diseases of Stomach (Cancer excepted)			2	2	1	1								
Diseases of Intestines (Cancer excepted)			2	2	1	1		1	1			1		
Appendicitis and Typhitis		2	13	15	8	7		2	2	2		5	6	
Diseases of Liver and Gallbladder			4	4	1	3			1	1		1	1	
Bright's Disease and Nephritis			31	31	19	12				1	2	5	12	11
Diseases of Women (not Cancer)						3								
Puerperal Septicemia			8	8		8						2		
Other Puerperal Diseases			8	8		8								
Cancer (not Cancer)			22	22	11	11	2		20		2	6		
Old Age			1	1	1									1
Accident		2	23	25	17	8		4	4	5	8	9	10	4
Homicide			2	2							1	1	1	
Suicide		1	2	3	2	1					1	2		1
Undeclared Causes			1	1		1	1		1					
All Other Causes		7	22	29	15	14	3		3	2	5	21	18	15
Totals for 1919	1	8	297	306	180	126	24	6	34	16	30	84	106	37

UNKNOWN ADDRESSES AND UNIDENTIFIED PERSONS, 1920
MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX AGE AND COLOR

CAUSES	All low	Colored	White	Native deaths	Males	Females	Under 18	18 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65 and over
Infantile Paralysis										6	1		
Typhoid Fever													
Scarlet Fever													
Whooping Cough													
Diphtheria													
Epidemic Meningitis (Cerebro Spinal)													
Other Epidemic Diseases													
Tuberculosis of Lungs (Consumption)		1	1									1	
Tuberculous Meningitis													
Other Tuberculosis			1	1	1							1	
Cancer, Malignant Tumor													
Simple Meningitis		1	1		1								2
Apoplexy, Softening of the Brain			1	1						1	1		2
Other Diseases of the Brain													
Phthisis Pulmonalis					1							1	
Other Respiratory Diseases													
Diseases of Stomach (Cancer excepted)													
Diarrhoeal Diseases (under 5 years)													
Acute Infectious Diseases													
Other Infectious Diseases													
Other Diseases of the Digestive System													
Other Diseases of the Circulatory System													
Other Diseases of the Respiratory System													
Other Diseases of the Nervous System													
Other Diseases of the Genitourinary System													
Other Diseases of the Endocrine System													
Other Diseases of the Musculoskeletal System													
Other Diseases of the Sensory System													
Other Diseases of the Integumentary System													
Other Diseases of the Circulatory System													
Other Diseases of the Respiratory System													
Other Diseases of the Nervous System													
Other Diseases of the Genitourinary System													
Other Diseases of the Endocrine System													
Other Diseases of the Musculoskeletal System													
Other Diseases of the Sensory System													
Other Diseases of the Integumentary System													

MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR
JANUARY, 1920.

CAUSES	White	Colored	Deaths	Males	Females	Under 1 Year	1 to 4 Years	5 to 14 Years	15 to 44 Years	45 to 64 Years	65 and Over
Total, All Causes	82	584	616	324	292	99	7	19	11	14	151
Infective Paratyphoid											
Typhoid Fever											
Malaria											
Smallpox											
Measles			5	2	3	3	2		5		
Scarlet Fever											
Whooping Cough											
Diphtheria			7	3	4	1	3	2	6	1	
Epidemic Meningitis	4	35	39	21	18	3	1	1	4	2	
Cerebro Spinal Meningitis		4	4	3	1		1	1	2		
Other Infective Diseases											
Tuberculosis of Lungs (Consumption)	5	44	49	33	16			1	1		
Tuberculous Meningitis	1	4	5	4	1		2	1	3		
Other Tuberculosis		1	1	1	1						
Cancer, Malignant Tumor		35	36	19	17						
Simple Meningitis		4	4	3	1	2	2		4		
Apoplexy Softening of the Brain		24	24	12	12						
Organic Heart Disease	4	57	61	34	27			1	1	2	
Bronchitis		11	11	8	3				10		
Pneumonia, Lobar	4	74	78	34	44	4	2	2	9	1	
Pneumonia, Broncho	2	39	41	13	28	11	7	2	20		
Other Respiratory Diseases		10	10	6	7						
Diseases of Stomach (Cancer excepted)		6	6	3	3				2	1	
Diseases of Intestines (under 5 years)		15	15	9	6	13	3		15		
Acute and Typhilitis		8	8	7	1					1	
Obstruction		4	4	4							
Cancer of Liver		3	3	3							
Bright's Disease and Nephritis		1	1	1							
Diseases of Women (not Cancer)											
Puerperal Septicaemia											
Other Puerperal Diseases											
Constitutional Diseases and Malformations	5	27	32	18	14	12			4		
Old Age		5	5	1	4						
Accident		27	27	19	8				5	4	
Homicide		1	1	1							
Suicide		2	2	1	1						
Undefined Causes											
All Other Causes	2	67	69	36	33	6	2	2	9	4	
Total for January 1920		6	6	388	377	106	9	4	17	3	60

The death rate for the month was 17.8 per 1,000 of population, as against 12.7 for the previous month. The present population of Newark is 414,216. The death rate for the month of January, 1919, was 21.7 estimated population 436,000.

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The death rate for the month of January 1919 was 14.9 per 1,000 of population, as against 17.8 for the previous month. The present population of New York is 314,116. The death rate for the month of February, 1919, was 15.9, estimated population, 430,000.

MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR
MARCH, 1920

CAUSES	Un- der 15	Col- ored	White	Total deaths	Males	Females	Under 1 Year	1 and Under 2	2 and Under 5	Under 5 Years	5 to 14	15 to 24	25 to 44	45 to 64	65 and Over
Total, All Causes	39	474	513	288	225	108	29	16	101	20	29	81	131	101	
Infantile Paralysis															
Dysentery															
Measles															
Scarlet Fever															
Whooping Cough															
Diphtheria															
Influenza															
Epidemic Meningitis (Cerebro Spinal)															
Other Epidemic Diseases															
Chronic Consumption (Tuberculosis)															
Other Chronic Diseases															
Chronic Malicious Tumor															
Simple Malicious															
Apoplexy Softening of the Brain															
Organic Heart Disease															
Stroke															
Paralysis of the Larynx															
Pharyngeal Cancer															
Other Respiratory Diseases															
Dysentery Stomach Cancer excepted															
Dysentery Stomach Cancer excepted															
Appendicitis and Typhoid															
Hernia, Intestinal Obstruction															
Cancer of Liver															
Cancer of Gallbladder and Nerves															
Cancer of Womb and Ovary															
Cancer of Neck and Throat															
Other Cancer Diseases															
Chronic Bronchitis and Malformation															
Obesity															
Arteriosclerosis															
Hypertension															
Scarlet															
Blindness Causes															
All Other Causes															
Total for March, 1919	7	584	638	330	308	94	27	27	148	29	45	148	148	130	

The death rate for the month was 14.3 per 1,000 of population as against 24.9 for the previous month. The present population of Newark is 414,216. The death rate for the month of March, 1919, was 17.8 estimated population, 430,000.

MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR
APRIL, 1920

CAUSE	Age	Color	Sex	Deaths	Males	Females	Under 1 Year	1 and Under 2	2 and Under 5	5 to 14	15 to 24	25 to 44	45 to 64	65 and Over
Total All Causes	37	426	463	241	292	78	29	22	129	13	37	66	107	111
I. Infectious Diseases														
Malaria														
Scarlet Fever														
Whooping Cough														
Diphtheria														
Epidemic Meningitis (Cerebro Spinal)														
Other Epidemic Diseases														
Tuberculosis of Lungs (Consumption)														
Tuberculous Meningitis														
Other Tuberculosis														
Cancer, Malignant Tumor														
Simple Meningitis														
Apoplexy, Softening of the Brain														
Organic Heart Disease														
Brucella														
Pneumonia, Broncho														
Other Respiratory Diseases														
Infectious Diseases (under 5 years)														
Appendicitis and Abscess														
Erysipelas, Infection, Cellulitis														
Cirrhosis of Liver														
Bright's Disease and Nephritis														
Dysentery, Cholera														
Diarrhea, Enteritis														
Other Diarrheal Diseases														
Cancer in Males and Females														
Alcoholism														
Hemiplegia														
Stroke														
Other Causes														
All Causes														

Notes for April, 1920

The death rate for the month was 134 per 1,000 of population. The death rate for the previous month (April, 1919) was 133, estimated population, 430,000.

MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX AGE AND COLOR
MAY 1920

CAUSES	Year 1919	Col- ored	White	Total	Males	Fe- males	Under 1 Year	1 to 4	5 and over	Under 1 Year	5 to 4	5 to 24	25 to 44	45 to 64	65 and over
Total All Causes	1	37	442	480	248	232	92	19	11	122	12	15	101	129	101
Infantile Paralysis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Typhoid Fever	---	---	1	1	1	---	---	---	---	---	---	1	---	---	---
Malaria	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Scarlet Fever	---	---	7	7	1	6	2	4	1	7	---	---	---	---	---
Measles	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Scarlet Fever	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Whooping Cough	1	3	4	8	3	5	3	1	---	4	---	---	---	---	---
Diphtheria	---	5	5	10	2	8	---	1	---	4	1	---	---	---	---
Influenza	1	1	2	3	---	---	---	---	---	---	---	---	---	---	---
Cerebral Meningitis (Cerebral Spinal)	1	2	3	5	1	4	1	1	---	2	1	---	---	1	1
Other Epidemic Diseases	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Tuberculosis of Lungs (Consumption)	1	5	32	37	16	21	---	---	---	1	1	---	---	6	1
Tuberculosis Meningitis	---	---	1	1	---	---	1	---	---	---	---	---	---	---	---
Tuberculosis Pleurisy	1	2	8	10	2	8	1	---	---	1	1	1	---	---	---
Cancer, Malignant Tumor	---	34	34	68	31	37	---	---	---	---	---	1	7	22	4
Simple Meningitis	---	2	2	4	---	---	1	1	---	2	---	---	---	---	---
Apoplexy Softening of the Brain	2	37	39	76	34	42	---	---	---	---	---	---	2	17	20
Organic Heart Disease	1	41	42	83	36	47	1	---	---	1	1	1	8	18	23
Stroke	---	6	6	12	3	9	4	---	---	4	---	---	---	---	2
Pneumonia Lobar	8	22	30	52	26	26	3	8	---	4	---	---	---	---	---
Pneumonia Broncho	4	20	24	44	8	16	9	6	1	16	---	---	---	4	4
Other Respiratory Diseases	---	4	4	8	3	5	---	---	---	---	---	1	---	---	---
Diseases of Stomach (Cancer excepted)	---	1	3	4	---	---	---	---	---	---	---	---	1	---	---
Diseases of Intestine (Typhoid excepted)	1	13	14	27	8	19	12	1	---	14	---	---	---	---	---
Appendicitis and Typhitis	---	3	4	7	3	4	---	---	---	---	---	---	2	1	1
Hernia, Intestinal Obstruction	---	1	1	2	---	---	---	---	---	---	---	---	---	---	---
Cirrhosis of Liver	---	6	6	12	5	7	---	---	---	---	---	---	---	4	2
Biliary Disease and Nephritis	1	46	47	93	19	74	1	1	---	1	1	---	12	15	16
Diseases of Women (not Cancer)	---	1	1	2	---	---	---	---	---	---	---	1	---	---	---
Puerperal Septicemia	---	6	6	12	---	---	---	---	---	---	---	---	1	---	---
Other Puerperal Diseases	---	37	42	79	14	65	42	---	---	42	---	---	---	---	---
Congenital Deformity and Malformation	---	5	5	10	---	---	---	---	---	---	---	---	---	---	---
Old Age	---	23	28	51	10	41	---	---	5	3	---	5	3	---	7
Accident	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Homicide	---	4	4	8	---	---	---	---	---	---	---	---	---	---	---
Suicide	---	1	1	2	---	---	---	---	---	---	---	---	---	---	---
Undefined Causes	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
All Other Causes	4	73	77	151	44	107	8	---	---	---	---	1	18	27	7
Total for May 1920	1	37	442	480	248	232	92	19	11	122	12	15	101	129	101

DEPARTMENT OF HEALTH

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The death rate for the month was 13.9 per 1,000 of population, as against 13.4 for the previous month. The present population of Newark is 414,216. The death rate for the month of May 1919 was 11.6 estimated population 430,000.

MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR
JUNE, 1920

CAUSES	White	Colored	Males	Females	Under 1 Year	1 and Under	2 and Under	Under 5 Years	5 to 14	15 to 24	25 to 44	45 to 64	65 and over
Total	185	84	134	51	53	—	—	—	—	27	67	96	68
Measles	—	—	—	—	—	—	—	—	—	—	—	—	—
Whooping Cough	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—	—
Scarlet Fever	—	—	—	—	—	—	—	—	—	—	—	—	—
Epidemic Meningitis (Cerebro Spinal)	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Epidemic Diseases	—	—	—	—	—	—	—	—	—	—	—	—	—
Tuberculous Meningitis	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Tuberculosis	—	—	—	—	—	—	—	—	—	—	—	—	—
Cancer, Malignant Tumor	—	—	—	—	—	—	—	—	—	—	—	—	—
Simple Meningitis	—	—	—	—	—	—	—	—	—	—	—	—	—
Apoplexy, Softening of the Brain	—	—	—	—	—	—	—	—	—	—	—	—	—
Organic Heart Diseases	—	—	—	—	—	—	—	—	—	—	—	—	—
Bronchitis	—	—	—	—	—	—	—	—	—	—	—	—	—
Pneumonia, Lobar	—	—	—	—	—	—	—	—	—	—	—	—	—
Pneumonia, Broncho	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Respiratory Diseases	—	—	—	—	—	—	—	—	—	—	—	—	—
Diseases of Stomach (Cancer excepted)	—	—	—	—	—	—	—	—	—	—	—	—	—
Diarrhoea, Diseases (under 5 years)	—	—	—	—	—	—	—	—	—	—	—	—	—
Appendicitis and Typhitis	—	—	—	—	—	—	—	—	—	—	—	—	—
Hernia, Intestinal Obstruction	—	—	—	—	—	—	—	—	—	—	—	—	—
Cirrhosis of Liver	—	—	—	—	—	—	—	—	—	—	—	—	—
Bright's Disease and Nephritis	—	—	—	—	—	—	—	—	—	—	—	—	—
Diseases of Women (not Cancer)	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal Septicemia	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Puerperal Diseases	—	—	—	—	—	—	—	—	—	—	—	—	—
Congenital Debility and Malformation	—	—	—	—	—	—	—	—	—	—	—	—	—
Infantile	—	—	—	—	—	—	—	—	—	—	—	—	—
Accident	—	—	—	—	—	—	—	—	—	—	—	—	—
Homicide	—	—	—	—	—	—	—	—	—	—	—	—	—
Suicide	—	—	—	—	—	—	—	—	—	—	—	—	—
Undeveloped Causes	—	—	—	—	—	—	—	—	—	—	—	—	—
All Other Causes	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	185	84	134	51	53	—	—	—	—	27	67	96	68

The death rate was 10.3 per 1,000 of population, as against 13.9 for the previous month. The percent of Negroes was 44.23. The death rate for the month of June 1919 was 9.2, estimated population, 436,000.

MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX AGE AND COLOR
JULY, 1920

CAUSES	Year	Colored	White	Total	Males	Females	Under 1 Year	Under 1 Year	Under 1 Year	5 to 14	15 to 24	25 to 44	45 to 64	65 and Over
Total All Causes	40	323	363	175	188	88	17	14	119	23	21	50	86	67
Infantile Paralysis		1	1	1			1							
Epidemic Fever									1					
Malaria														
Smallpox														
Measles			1	1	1									
Scarlet Fever									1					
Whooping Cough		6	6	2	4	6			6					
Diphtheria		4	4	3	1				3	1				
Influenza														
Epidemic Meningitis (cerebro spinal)		1	1	2	1	1	1		1	1				
Other Epidemic Diseases														
Chronic Diseases of Lungs (Consumption)	7	25	32	23	10				1	7	12	11	1	
Chronic Meningitis		3	3	1	2				2	1				
Other Chronic Diseases		4	4	3	2						3	1		
Cancer Malignant Tumor	1	28	29	13	16				3			1	17	11
Stomach Diseases		4	4	3	1	1						1		
Apoplexy, Stiffening of the Brain	2	7	10	6	10							2	8	9
Organic Heart Disease		28	28	12	16					3			12	13
Bronchitis		3	3	3	3	3			3					
Pneumonia	1	7	8	3	3	3			1	4		1	2	1
Pneumonia Broncho		9	9	5	4	3			6	1				
Other Respiratory Diseases		5	5	2	2	1			1	1				
Diseases of Stomach (Cancer excepted)		5	5	2	3	4							2	1
Intestinal Diseases (Cancer excepted)	1	43	43	20	24	32			7	5	44			
Appendicitis and Typhitis	3	5	8	3	7					2	2	3	1	
Hernia, Intestinal Obstruction		2	2	1	1								2	
Cirrhosis of Liver		1	1	1									1	
Stricture Disease and Hemorrhoids	3	97	28	17	17				1	1	2	5	11	8
Diseases of Women (not Cancer)	1	1	2		2									
Puerperal Septicemia	1	3	4	4	4							3		1
Other Puerperal Diseases		5	5	5	5						1	4		
Chronic Degenerative and Malformation	3	26	28	14	14	26			26					
Old Age		1	22	15	7	1			5	5	2	6	9	2
Accident		1	1	1	1								1	
Homicide		1	1	1	1								1	
Suicide		1	1	1	1								1	
Undeclared Causes		4	4	4	4				4	2	9	8	13	19
All other Causes		4	4	4	4									
TOTAL JULY 1920	40	323	363	175	188	88	17	14	119	23	21	50	86	67

DEPARTMENT OF HEALTH

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The death rate for the month was 10.5 per 1,000 of population, as against 10.3 for the previous month. The present population of Newark is 214,116. The death rate for the month of July, 1919, was 10.9 estimated population, 439,600.

MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR
AUGUST, 1920

CAUSES	White	Colored	Males	Females	Under 1 Year	1 and Under 5	5 and Under 10	10 and Under 15	15 and Under 20	20 and Under 25	25 and Under 35	35 and Over		
Total, All Causes	31	629	390	239	108	86	16	12	113	14	24	60	88	61
Infantile Paralysis	1	1	1	1										
Typhoid Fever	2	2	2	2					1	1				
Measles	2	2	2	2			1	1	2					
Scarlet Fever														
Diphtheria	6	6	4	4	4									
Influenza	2	2	1	1					2					
Spinal Meningitis (Cerebro Spinal)			1	1										
Other Epidemic Diseases													1	
Pneumonia of Lungs (Cerebro Spinal)	7	37	44	28	10	1			2	2	7	10		
Tuberculous Meningitis	1	3	4	3	1	2	1							
Other Tuberculous	1	3	4	3	1									
Cancer, Malignant Tumor	1	27	28	8	20						2	1		
Simple Meningitis		1	1	1					1			4	12	12
Apoplexy Softening of the Brain		10	10	4	8								4	
Organic Heart Disease	1	25	26	14	12						4	10	8	
Prothrombin					1	2								2
Pneumonia, Lobar		7	7	8	4		3							
Pneumonia Broncho	1	2	3	2	1						1	1		
Other Respiratory Diseases		1	1	1										
Diseases of Stomach (Cancer excepted)	1	3	4	2	2	2							1	1
Gastrointestinal Diseases (under 5 years)	4	38	42	23	19	37	5	6	42					
Appendicitis and Typhilitis		6	6	4	2								2	
Hepatitis and Other Diseases		1	1	1	1									
Bright's Disease and Nephritis	2	28	30	19	11	1				2	2	16		9
Diseases of Women (not Cancer)		1	1	1	1									
Puerperal Septicemia		1	1	1	1						1			
Other Puerperal Diseases		3	3	3	3						3			
Constitutional Diseases and Malformations		3	3	3	3	36								
Old Age		3	3	3	3									
Arteriosclerosis	1	21	22	18	4			1	1	1	5	5	8	3
Hypertension	1	2	3	2	1	1			1		1	1	1	
Stroke		7	7	6	1						1	1	3	2
Unidentified Causes														
All Other Causes	6	42	48	28	20	3	1	2	6	4	1	10	13	14
TOTALS for August, 1919	44	914	548	381	167	77	17	10	103	20	13	20	80	54

Notes for August, 1919

The death rate for the month was 10.4 per 1,000 of population, as against 10.7 for the previous month. The population of Newark is 414,216. The death rate for the month of August, 1919, was 9.7 estimated population 413,000.

MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX AGE AND COLOR
SEPTEMBER, 1920

CAUSES	White	Colored	White	Colored	White	Colored	Under 1 Year	Infant	Infant	Infant	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years	35 Years	40 Years	45 Years	50 Years	55 Years	60 Years	65 Years	70 Years	75 Years	80 Years	85 Years	90 Years	95 Years	100 Years	Over
Total, All Causes	1	29	321	351	167	79	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Infective Parasys	1	1	3	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Typhoid Fever	1	1	3	3	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Malaria	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Smallpox	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Measles	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Scarlet Fever	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Whooping Cough	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Influenza	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Epidemic Meningitis (Cerebro Spinal)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Other Epidemic Diseases	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Tuberculosis of Lungs (Consumption)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Other Tuberculosis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Cancer, Malignant Tumor	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Scalp Meningitis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Apoplexy, Softening of the Brain	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Organic Heart Disease	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Brachitis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Pneumonia, Lobar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Pneumonia, Broncho	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Other Respiratory Diseases	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Diseases of Stomach (Cancer excepted)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Liver Diseases (Cancer excepted)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Appendicitis and Typhlitis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hernia, Intestinal Obstruction	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Cirrhosis of Liver	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Bright's Disease and Nephritis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Diseases of Women (not Cancer)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Puerperal Septicemia	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Other Puerperal Diseases	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Congenital Deformities and Malformations	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Old Age	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Accident	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Homicide	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Suicide	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Undefined Causes	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
All Other Causes	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Total for September 1919	29	31	34	161	147	61	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

The death rate for the month was 10.2 per 1,000 of population as against 10.4 for the previous month. The present population of Newark is 414,216. The death rate for the month of September 1919, was 9.3, estimated population, 430,000.

MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX AGE AND COLOR
OCTOBER, 1920

CAUSES	White	Colored	Male	Female	Male	Female	Under 1 Year	1 and Under	2 and Under	Under 5 Years	5 to 9	10 to 14	15 to 24	25 to 44	45 to 64	65 and over
All Causes	1	25	47	46	143	69	1	1	90	22	15	69	95	76		
Infantile Paralysis																
Typhoid Fever																
Malaria																
Smallpox																
Measles		1	1	1				1		1						
Scarlet Fever		1	1	1						1						
Whooping Cough		6	6	4	2	5		1		6	1					
Diphtheria		6	6	3	2	5		2	1	3	2					
Epidemic Meningitis (Cerebro Spina.)	1		1		1				1	1						
Other Epidemic Diseases																
Tuberculosis Meningitis		5	5	2	3					1	1			16	4	
Other Tuberculosis	4	1	5	5	8	1		2	1	3	1			1	1	
Cancer Malignant Tumor	2	25	28	13	15					1		1		3	10	8
Simple Meningitis		2	3	2	1			1		1	2					
Alcohol, Softening of the Brain	1	20	21	10	11									3	5	13
Organic Diseases of Brain														4	12	
Hydrocephalus		2	2	1	1	2				2						
Pneumonia Lobar	2	11	13	6	5				2	2				6	3	2
Pneumonia Bronchitis										1						
Other Respiratory Diseases		4	4	4	3	1				1						
Diseases of Stomach (Cancer excepted)														3		1
Digestive Diseases and Intestines		17	17	8	9	15			1	1						
Appendicitis and Typhoid		1	1	1							1					
Hemorrhage of Intestine			1	1												
Cholera and Typhoid		1	1		1											
Bright's Disease and Nephritis	1	3	4	26	19						1	2		7	20	15
Diseases of Women (not Cancer)																
Puerperal Septicemia																
Other Puerperal Diseases		1	1		1									1		
Congenital Defects and Malformations				11	21											
Old Age																
Accident	1	24	25	30	5				1	1	5			7	7	1
Homicide		1	1		1								1			
Suicide	1	1	2	1	1											
Undefined Causes																
All Other Causes	5	35	60	28	32	5		1	3	2	2	4	13	14	18	
Total	8	61	107	106	200	79	1	1	93	23	16	72	107	94		

The death rate for the month was 10.7 per 1,000 of population, as against 10.2 for the previous month. The present population of New York is 4,447,600. The death rate for the month of October, 1919, was 10.7 estimated population, 4,300,000.

MORALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR
NOVEMBER 1920

CAUSES	Y o w	C o l o r e d	W h i t e	T o t a l	M a l e s	F e m a l e s	U n d e r 1 Y e a r	1 a n d U n d e r 2	2 a n d U n d e r 5	U n d e r 5 Y e a r s	5 t o 1 4	15 t o 24	25 t o 44	45 t o 64	65 a n d O v e r
Total All Causes		31	344	475	268	167	67	41	8	66	12	22	61	96	161
Infantile Paralysis			1	1	1			1							
Typhoid Fever															
Malaria															
Smallpox															
Measles															
Scarlet Fever			2	2		2		1	1	2					
Whooping Cough			3	3	2	1	1	1		3					
Diphtheria		1	3	4	3	1		1	1	2	2				
Influenza															
Chorea Menstritis (Cervical Spinal)															
Other Epidemic Diseases															
Tuberculosis of Lungs (Consumption)			1	1	0	1					1	5	2	10	1
Tuberculosis Meningitis			1	1	1										
Other Tuberculosis			1	1	1					1					
Cancer Malignant Tumors			1	1	1										
Stomach Meningitis			2	2		1							4	15	10
Apoplexy, Softening of the Brain		1	38	39	16	23				1	1				
Organic Heart Disease		2	31	33	15	19					4	3	3	11	25
Wrenchitis		2	5	7	2	5							2		
Pneumonia, Lobar		4	18	22	12	10		1							
Pneumonia, Bronchopneumonia			1	1	0	1									
Other Respiratory Diseases			5	5	5	5		1		1			1		
Diseases of Stomach (Cancer excepted)			3	3	1	2									
Diseases of Intestines (Cancer excepted)		1	1	2	1	1		3	2	25					
Appendicitis and Typhlitis			1	1	1	1									
Hernia Intestinal Obstruction			5	5	1	4			1				1		
Cirrhosis of Liver			2	2	2										
Chronic Disease and Neobritis		4	39	43	23	20							6	19	16
Diseases of Women (not Cancer)			2	2		2									
Puerperal Sepsis			1	1		1									
Other Puerperal Diseases			1	1		1									
Congenital Debility and Malformation		2	28	30	20	10	30			30					
Old Age															
Accident			19	19	14	5	1			1	2	3	6	5	5
Homicide			1	1	1										
Suicide			8	8	7	1						1	1	5	1
Undefined Causes															
All Other Causes		3	42	45	26	19	2		1	3		5	7	11	19
Rate for November, 1919	16	17	200	217	186	145	14	6	65	20	60	67	103	100	100

The death rate for the month was 10.9 per 1,000 of population, as against 10.7 for the previous month. The present population of Newark is 242,115. The death rate for the month of November, 1919, was 10.9, estimated population, 430,000.

MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR
DECEMBER, 1920.

CAUSES	Ye. old	Col- ored	White	Total deaths	Males	Fe- males	Under 1 Year	1 and Under 1	2 and Under 5	Under 5 Years	5 to 14	15 to 24	25 to 44	45 to 64	65 and Over
Total All Causes	22	47	44	207	235	74	2	16	22	12	16	85	120	93	
Infantile Parasites													1		
Typhoid Fever		1	1	1											
Malaria															
Rubeola															
Measles		3	3	1	2			3		3					
Scarlet Fever		3	3	1	2				1	1		1	1		
Whooping Cough		2	2		2	1			1	2					
Infantile		10	10	7	6			2	6	8	1	1			
Influenza		1	1		1								1		
Epilepsy, Meningitis, Cerebro Spinal,															
Other Epileptic Diseases															
Tuberculosis of Lungs (Consumption)	4	36	40	24	16				1	1		4	21	12	2
Tuberculosis of Menstrues		1	1		1				1	1					
Other Tuberculosis															
Cancer, Malignant, Breast		31	31	13	18								6	17	8
Scalp Meningitis		6	6	2	4	1		1		2		1	3	1	
Apoplexy, St. of the Brain		32	32	11	21									17	14
Organic Heart Disease	1	38	37	21	8	1			1				4	18	
Breast Cancer	1	7	8	2	6	3									
Pneumonia, Lobar	3	34	37	22	16	7		3	1	11	2	3	12	5	4
Pneumonia, Broncho		24	26	15	11	9		7	3	9	1			2	3
Other Respiratory Diseases	1	6	4	3	1							1	1	1	1
Diseases of Stomach (Cancer excepted)		1			1										
Diarrhoea, Dysentery (under 5 years)		12	13	5	8	11				13					
Appendicitis and Typhitis		3	3		3						1		1	1	
Hernia, Intestinal Obstruction		6	6	3	3							1			2
Cirrhosis of Liver		1	1	1											
Bright's Disease and Nephritis	3	53	56	2	35				1	1	1	1	8	23	12
Diseases of Women (not Cancer)															
Puerperal Septicemia		4	4		4									4	
Other Puerperal Diseases	1	2	3		3									3	
Congenital Deformity and Malformation	3	31	34	16	18	34				34					
Old Age															
Accident		20	20	14	6				2	2	2	1	5	6	4
Homicide		1	1		1										
Suicide			1	1											
Unlabeled Causes															
All Other Causes	1	1	51	53	23	30	7	1		8	1	1	0	12	21
Totals for Dec. 1919	10	47	46	93	97	31	14	16	24	18	26	106	190	108	

The death rate for the month was 12.7 per 1,000 of population, as against 10.9 for the previous month. The present population of Newark is 414,216. The death rate for the month of December 1919 was 12.7 per 1,000 of population.

DEATHS IN INSTITUTIONS, ETC., FOR 1920

Newark City Hospital.....	927
St Michael's Hospital	220
Newark Memorial Hospital.....	76
St James Hospital.....	63
St. Barnabas Hospital.....	59
Presbyterian Hospital	40
Homoeopathic Hospital	43
Newark Private Hospital	24
Newark Maternity Hospital....	13
Beth Israel Hospital.....	98
Women and Children's Hospital	21
Essex County Isolation Hospital (Newark residents) ..	169
Babies' Hospital	51
Lincoln Private Hospital	4
Clinton Private Hospital	20
Essex County Hospital for Insane (Newark residents) ..	6
East End Hospital	2
North End Hospital	1
Port Newark Hospital	1
Eye and Ear Hospital	4
Home for Incurables	20
Home for Crippled Children	4
Arthur Comfort Home....	12
Little Sisters of the Poor (Home for Aged)	51
Florence Crittenden Home	2
Baptist Home	2
Pomeroy Home	1
Ideal Home for the Aged	1
St. Mary's Orphanage..	3
Alms House, Ivy Hill (Newark residents) ..	15
House of Good Shepherd	3
Camp Gillen	1
East Side Day Nursery	9
Hotels	3

Factories	3
On Streets	4
Passaic River	4
Morris Canal	4
Railroad Tracks	2
Railroad Train	1
Trolley Car	1
Railroad Depot	2
Freight Yard	1
Branch Brook Park	1
Weequahic Park Lake	1
Heller Field	1
Woodland Cemetery	1
Ambulance en route to Hospital	2
Auto, en route to Hospital	2

Mortality Statistics of Newark

FOR THE YEAR 1920

INCLUDING NON RESIDENT DEATHS, ARRANGED TO GIVE
DISEASE, AGE AND SEX ACCORDING TO INTERNATIONAL
CLASSIFICATION, COMPILED BY THE DIVISION OF VITAL
STATISTICS, DEPARTMENT OF HEALTH, NEWARK, N J

MORTALITY CAUSES ARRANGED AS FOLLOWS:

MALE

- 1 General Diseases
- 2 Nervous System and Organs of Special Sense.
- 3 Diseases of Circulatory System.
- 4 Diseases of Respiratory System
- 5 Diseases of Digestive System
- 6 Non-Venereal Diseases of Genito-Urinary System
- 7 Diseases of Skin and Cellular Tissue.
- 8 Diseases of Bones and Organs of Locomotion
- 9 Malformations
- 10 Old Age
- 11 External Causes --
 - Suicides
 - Accidents.
 - Homicides
- 12 Ill Defined Diseases.

FEMALE

- 1 General Diseases
- 2 Nervous System and Organs of Special Sense.
- 3 Diseases of Circulatory System
- 4 Diseases of Respiratory System
- 5 Diseases of Digestive System
- 6 Non-Venereal Diseases of Genito-Urinary System
- 7 The Puerperal State
- 8 Diseases of Skin and Cellular Tissue
- 9 Diseases of Bones and Organs of Locomotion
- 10 Malformations
- 11 Old Age
- 12 External Causes
 - Suicides
 - Accidents
 - Homicides
- 13 Ill Defined Diseases

MALE MORTALITY FIGURES FOR NEWARK FOR YEAR 1920

Including non-resident deaths arranged to give bias and age according to International Classification

CAUSES OF DEATH		Mortality from All Causes									
		General Diseases									
		Various Systems and Organs of Special Note									
		Diseases of Circulatory System									
		Diseases of Respiratory System									
		Diseases of Digestive System									
		Non-venereal Diseases of Genito-Urinary System									
		Diseases of Skin and Cellular Tissues									
		Diseases of Bones and Organs of Locomotion									
		IX Malformations									
		X Old Age									
		XI External Causes									
		Suicides									
		Accidents									
		Homicides									
		VII By defined Diseases									
		I GENERAL DISEASES Total									
		Typhoid Fever									
		Malaria									
		Scarlet Fever									
		Whooping Cough									
		Diphtheria and Group									
		Typhus									
		Total									
		10 to 14									
		15 to 19									
		20 to 24									
		25 to 29									
		30 to 34									
		35 to 39									
		40 to 44									
		45 to 49									
		50 to 54									
		55 to 59									
		60 to 64									
		65 to 69									
		70 to 74									
		75 to 79									
		80 to 84									
		85 to 89									
		90 to 94									
		95 to 99									
		Over 100									

MALE MORTALITY FIGURES FOR NEWARK FOR YEAR 1920—(continued)

CAUSES OF DEATH	All Ages	Under 1	1	2	3	4	Total Under 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and Over
Purulent Infection and Septicæmia	1	4					4					1				1	1				1				
TUBERCULOSIS—All Forms	161		1	4			9	4	11	15	22	31	4	4	45	40	24	22	14	5	8	1		1	
Tuberculosis of Lungs	158			2			2		9	15	17	33	39	39	47	38	22	20	14	4	3	1		1	
Acute Miliary Tuberculosis											1		1	1											
Tuberculosis Meningeæ				1	2		2	2	1		2			1			1								
Abdominal Tuberculosis							1		1			1					1	1							
Pott's Disease								1			1				1	1				1					
Tuberculosis of Other Organs																1		1							
Unspecified Tuberculosis								1																	
Deaths	2						2																		
SYPHILIS	3						3									2	2	6							
CANCER—All Forms	161		1				1			1		1	1	1	9	17	16	39	22	22	12	13	3	2	
Cancer of Mouth and Throat	19														1	2	1	2		1	1		1		
Cancer of Stomach and Liver	85											1	1	1	6	9	7	26	13	11	4	3		1	
Cancer of Peritoneum, Intestines, Rectum	13														2	2		4	2	1	1	1			
Cancer of Skin	4																	1	1	1	1				
Cancer of Other Organs and Organs not specified				1			1			1						4	8	8	4	9	5	8	2		
Acute Articular Rheumatism										1						1	1								
Chronic Rheumatism and Gout																		1							
Diphtheria				1			1				1		1	2	2	7	4	1			2				
Exophthalmic Goiter	1												1												
Leukemia	1						1			1	1						1	1		1					
Acute Leukemia							1																		
Other Cancer Diseases													1		1		1	2	1			1			
Acute or Chronic	4												1	1		1									
Chronic Lead Poisoning	1												1		1	1									

MALE MORTALITY FIGURES FOR NEWARK FOR YEAR 1920—(Continued)

CAUSES OF DEATH	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to and Over					
II NERVOUS SYSTEM AND ORGANS OF SPECIAL SENSE																									
Total	147	17	10	1	2	1	29	8	5	5	2	2	3	5	8	14	7	22	16	26	23	15	4	2	1
Epilepsies	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Meningitis	1	1	1	1	1	1	11	3	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Cerebral Spinal Meningitis	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Cerebral Abscess	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Tubercular Abscess	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Other Diseases of Spinal Cord	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Acute Anterior Poliomyelitis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Cerebral Hemorrhage Apoplexy	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
General Paralysis of the Insane	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Other Forms of Mental Alienation	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Epilepsy	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Convulsions (under 5 years)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Chorea	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Neuralgia and Neuritis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Other Diseases of Nervous System	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Diseases of Eyes and Annexa	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Diseases of Ears	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
III DISEASES OF CIRCULATORY SYSTEM																									
Total	147	17	10	1	2	1	29	8	5	5	2	2	3	5	8	14	7	22	16	26	23	15	4	2	1
Acute Endocarditis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Organic Diseases of the Heart	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Angina Pectoris	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Diseases of Arteries Atherosclerosis, etc.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Phlebitis and Thrombosis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Diseases of Veins	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Diseases of Lymphatic System	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Other Diseases of Circulatory System	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

MAY 1 MONTHLY INDEKS FOR NEWARK FOR YEAR 1929 *continued*

CAUSES OF DEATH	AGE PERIODS																								Over 90
	All Ages	Age 1	5	9	14	19	24	29	34	39	44	49	54	59	64	69	74	79	84	89					
A. DISEASES OF RESPIRATORY SYSTEM																									
Malaria	426	100	53	15	6	2	165	10	4	10	14	28	28	21	35	25	34	12	30	11	21	6	6	4	1
Diseases of Throat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acute Bronchitis	43	30	3	1	-	-	34	-	-	1	-	-	-	-	2	2	1	-	2	-	1	-	1	-	-
Chronic " "	5	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	-	-	-	-	1	1	1	-	-
Croup	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pneumonia	-	1	-	4	-	-	30	4	4	7	9	2	11	1	1	5	8	7	10	2	3	1	1	-	-
Pharyngitis	-	-	-	-	-	-	9	-	-	-	1	-	-	1	1	-	1	-	1	-	-	-	-	-	-
Pulmonary Congestion	14	2	-	-	-	-	2	1	-	-	-	-	1	2	1	3	2	1	1	-	-	-	-	-	-
Gangrene of Lung	2	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-
Asthma	9	-	-	-	-	-	-	-	-	-	-	-	1	1	1	-	1	-	2	2	1	-	-	-	-
Other Diseases of Respiratory System	1	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
B. DISEASES OF DIGESTIVE SYSTEM																									
Ebola	260	121	24	3	7	2	157	6	5	4	5	7	4	7	9	8	17	12	16	3	4	8	1	1	-
Diseases of Pharynx	4	2	1	-	-	-	3	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ulcer of Stomach	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Other Diseases of Stomach	7	5	1	-	-	-	6	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dyspepsia and Indigestion under 2 years	-	-	-	-	-	-	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Inflammation of Intestines under 2 years	5	-	-	-	-	-	9	1	-	-	-	-	2	1	-	1	1	2	-	-	-	-	-	-	-
Appendicitis and Typhlitis	37	-	-	2	1	-	3	4	4	2	3	2	1	4	2	6	2	3	1	-	-	-	-	-	-
Hernia	6	1	-	-	-	-	1	-	-	-	1	1	1	-	1	-	1	-	-	-	-	-	-	-	-
Intestinal Obstruction	10	1	-	-	-	-	1	1	-	-	-	-	1	-	2	3	-	2	-	-	-	-	-	-	-
Other Diseases of Intestines	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Cirrhosis of Liver	28	-	-	-	-	-	-	-	-	-	-	2	-	1	2	6	4	6	1	2	2	1	1	-	-
Biliary Calculi	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Other Diseases of Liver	10	-	-	-	-	-	-	-	-	-	-	-	2	1	1	-	2	2	-	1	1	-	-	-	-
Simple Peritonitis (non-puerperal)	5	1	1	-	-	-	2	-	-	-	-	1	1	1	-	-	-	-	-	-	-	-	-	-	-
Other Diseases of Digestive System	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
C. DISEASES OF GENITOURINARY SYSTEM (NON-PUERPERAL)																									
Ebola	28	-	1	-	-	-	9	2	3	5	7	7	9	10	1	1	20	3	51	47	46	25	12	10	-

MALE MORTALITY FIGURES FOR NEWARK FOR YEAR 1920—*continued*

CAUSES OF DEATH	All Ages	Un- der 1	Under 5				Total Under 5	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
			1	2	3	4		to 9	to 14	to 19	to 24	to 29	to 34	to 39	to 44	to 49	to 54	to 59	to 64	to 69	to 74	to 79	to 84	to 89	and Over
Acute Nephritis	23	0	3	1			7			3	2	1					1	3	0	2	2				
Bright's Disease	24	1					1	2	1	2	4	4	6	10	1	18	19	25	35	29	33	17	9	10	
Other Diseases of Kidneys	65								2			0			1	2	6	5	11	10	8	6	3		
Diseases of Bladder	3																		1	1	1				
Diseases of Urethra	4										1				1		1								
Diseases of Prostate	4																	1			3				
Diseases of Breast (non puerperal)	1	1					1																		
VII. DISEASES OF SKIN—Total	14	5	1				6				1			1			2			1	1			1	
Gangrene	3															1					1			1	
Erysipelas	4	1					1										2			1					
Acute Abscess	3	1					4				1														
Other Diseases of Skin	2		1				1							1											
VIII. DISEASES OF BONES, ORGANS OF LOCOMOTION—Total	11	2		1			3	1	1	2		1			1		1			1					
Diseases of Bones	6	1		1			2	1	1	1		1													
Diseases of Joints	4	1					1			1					1		1								
Other Diseases of Organs of Locomotion	1																			1					
IX. MALFORMATION—Total	237	234		1			235																		
Congenital Malformations	24	23		1			24																		
Congenital Debility	174	174					174																		
Other Causes, Early Infancy	37	37					37																		
X. OLD AGE—Total	12																				3		4	4	1
Senility	12																				3		4	4	1
XI. EXTERNAL CAUSES—Total	253	5	1	3	5	3	17	23	8	12	36	20	14	16	20	18	18	30	10	9	8	6	2	6	
TOTAL SUICIDES	27									2	5	2	1	1	1	1	1	2	3	1	3		1		
Suicide by Poisoning	4															1									

MALE MORTALITY FIGURES FOR NEWARK FOR YEAR 1920 (Continued)

CAUSES OF DEATH	All ages	Under 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and Over
Suicide by Asphyxia					1	1	1			1	2		1	2				1		
Suicide by Hanging													1							
Suicide by Drowning					1							1								
Suicide by Firearms						4									1	1	1			
Suicide by Cutting or Piercing Instruments							1													
TOTAL ACCIDENTS	6				17	23	8	10	29	14		18	17	8		8	5	6	1	6
Other Acute Poisonings						1		1			1	3	4	3						
Conflagration								1					1	1						
Burns					5				1											
Absorption of Gases								2	1	1	1					1				
Drowning					3			1	1					2		1	1	2	3	1
Fall					3	3	2	1	3	1		1	1	3		3				3
Machinery								2	3				1		1					
Roads and					1		1	2	1	4	4	1	1							
Street Cars					1	1														
Automobiles					1	1								1		1		1		1
Other Vehicles					1	1		1	4	3	2	3	1	1	3	1	3	3	1	1
Boats													1							
Boys						1														
Motorcycles								1												
Starvation					1															
Electricity (Lightning excepted)					1										1					
Other External Violence					1	1		2				1			1	1				
TOTAL HOMICIDES	1					1		4	1			3								
Homicides by Firearms								3	1	1		1								
Homicides by Cutting or Piercing Instruments						1	1					1								
Homicides by Other Means	1											1								
XII UNDEFINED DISEASES Total	2				2				1	1					1					
Undefined Organic Disease	1														1					
Not Specified or If defined	1	1	1		2			1	1	1										

FEMALE MORTALITY FIGURES FOR NEWARK FOR YEAR 1920

Including non resident deaths, arranged to give disease and age according to International Classification

CAUSES OF DEATH	In										Total										5										10										15										20										25										30										35										40										45										50										55										60										65										70										75										80										85										90										95										100										105										110										115										120										125										130										135										140										145										150										155										160										165										170										175										180										185										190										195										200										205										210										215										220										225										230										235										240										245										250										255										260										265										270										275										280										285										290										295										300										305										310										315										320										325										330										335										340										345										350										355										360										365										370										375										380										385										390										395										400										405										410										415										420										425										430										435										440										445										450										455										460										465										470										475										480										485										490										495										500										505										510										515										520										525										530										535										540										545										550										555										560										565										570										575										580										585										590										595										600										605										610										615										620										625										630										635										640										645										650										655										660										665										670										675										680										685										690										695										700										705										710										715										720										725										730										735										740										745										750										755										760										765										770										775										780										785										790										795										800										805										810										815										820										825										830										835										840										845										850										855										860										865										870										875										880										885										890										895										900										905										910										915										920										925										930										935										940										945										950										955										960										965										970										975										980										985										990										995										1000										1005										1010										1015										1020										1025										1030										1035										1040										1045										1050										1055										1060										1065										1070										1075										1080										1085										1090										1095										1100										1105										1110										1115										1120										1125										1130										1135										1140										1145										1150										1155										1160										1165										1170										1175										1180										1185										1190										1195										1200										1205										1210										1215										1220										1225										1230										1235										1240										1245										1250										1255										1260										1265										1270										1275										1280										1285										1290										1295										1300										1305										1310										1315										1320										1325										1330										1335										1340										1345										1350										1355										1360										1365										1370										1375										1380										1385										1390										1395										1400										1405										1410										1415										1420										1425										1430										1435										1440										1445										1450										1455										1460										1465										1470										1475										1480										1485										1490										1495										1500										1505										1510										1515										1520										1525										1530										1535										1540										1545										1550										1555										1560										1565										1570										1575										1580										1585										1590										1595										1600										1605										1610										1615										1620										1625										1630										1635										1640										1645										1650										1655										1660										1665										1670										1675										1680										1685										1690										1695										1700										1705										1710										1715										1720										1725										1730										1735										1740										1745										1750										1755										1760										1765										1770										1775										1780										1785										1790										1795										1800										1805										1810										1815										1820										1825										1830										1835										1840										1845										1850										1855		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TABLE MORTALITY FIGURES FOR NEWARK FOR YEAR 1920, continued.

CAUSES OF DEATH	1907		1908		1909		1910		1911		1912		1913		1914		1915		1916		1917		1918		1919		1920		1921		1922		1923		1924		1925		1926		1927		1928		1929		1930		1931		1932		1933		1934		1935		1936		1937		1938		1939		1940		1941		1942		1943		1944		1945		1946		1947		1948		1949		1950		1951		1952		1953		1954		1955		1956		1957		1958		1959		1960		1961		1962		1963		1964		1965		1966		1967		1968		1969		1970		1971		1972		1973		1974		1975		1976		1977		1978		1979		1980		1981		1982		1983		1984		1985		1986		1987		1988		1989		1990		1991		1992		1993		1994		1995		1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		2006		2007		2008		2009		2010		2011		2012		2013		2014		2015		2016		2017		2018		2019		2020		2021		2022		2023		2024		2025		2026		2027		2028		2029		2030		2031		2032		2033		2034		2035		2036		2037		2038		2039		2040		2041		2042		2043		2044		2045		2046		2047		2048		2049		2050		2051		2052		2053		2054		2055		2056		2057		2058		2059		2060		2061		2062		2063		2064		2065		2066		2067		2068		2069		2070		2071		2072		2073		2074		2075		2076		2077		2078		2079		2080		2081		2082		2083		2084		2085		2086		2087		2088		2089		2090		2091		2092		2093		2094		2095		2096		2097		2098		2099		2100		2101		2102		2103		2104		2105		2106		2107		2108		2109		2110		2111		2112		2113		2114		2115		2116		2117		2118		2119		2120		2121		2122		2123		2124		2125		2126		2127		2128		2129		2130		2131		2132		2133		2134		2135		2136		2137		2138		2139		2140		2141		2142		2143		2144		2145		2146		2147		2148		2149		2150		2151		2152		2153		2154		2155		2156		2157		2158		2159		2160		2161		2162		2163		2164		2165		2166		2167		2168		2169		2170		2171		2172		2173		2174		2175		2176		2177		2178		2179		2180		2181		2182		2183		2184		2185		2186		2187		2188		2189		2190		2191		2192		2193		2194		2195		2196		2197		2198		2199		2200		2201		2202		2203		2204		2205		2206		2207		2208		2209		2210		2211		2212		2213		2214		2215		2216		2217		2218		2219		2220		2221		2222		2223		2224		2225		2226		2227		2228		2229		2230		2231		2232		2233		2234		2235		2236		2237		2238		2239		2240		2241		2242		2243		2244		2245		2246		2247		2248		2249		2250		2251		2252		2253		2254		2255		2256		2257		2258		2259		2260		2261		2262		2263		2264		2265		2266		2267		2268		2269		2270		2271		2272		2273		2274		2275		2276		2277		2278		2279		2280		2281		2282		2283		2284		2285		2286		2287		2288		2289		2290		2291		2292		2293		2294		2295		2296		2297		2298		2299		2300		2301		2302		2303		2304		2305		2306		2307		2308		2309		2310		2311		2312		2313		2314		2315		2316		2317		2318		2319		2320		2321		2322		2323		2324		2325		2326		2327		2328		2329		2330		2331		2332		2333		2334		2335		2336		2337		2338		2339		2340		2341		2342		2343		2344		2345		2346		2347		2348		2349		2350		2351		2352		2353		2354		2355		2356		2357		2358		2359		2360		2361		2362		2363		2364		2365		2366		2367		2368		2369		2370		2371		2372		2373		2374		2375		2376		2377		2378		2379		2380		2381		2382		2383		2384		2385		2386		2387		2388		2389		2390		2391		2392		2393		2394		2395		2396		2397		2398		2399		2400		2401		2402		2403		2404		2405		2406		2407		2408		2409		2410		2411		2412		2413		2414		2415		2416		2417		2418		2419		2420		2421		2422		2423		2424		2425		2426		2427		2428		2429		2430		2431		2432		2433		2434		2435		2436		2437		2438		2439		2440		2441		2442		2443		2444		2445		2446		2447		2448		2449		2450		2451		2452		2453		2454		2455		2456		2457		2458		2459		2460		2461		2462		2463		2464		2465		2466		2467		2468		2469		2470		2471		2472		2473		2474		2475		2476		2477		2478		2479		2480		2481		2482		2483		2484		2485		2486		2487		2488		2489		2490		2491		2492		2493		2494		2495		2496		2497		2498		2499		2500		2501		2502		2503		2504		2505		2506		2507		2508		2509		2510		2511		2512		2513		2514		2515		2516		2517		2518		2519		2520		2521		2522		2523		2524		2525		2526		2527		2528		2529		2530		2531		2532		2533		2534		2535		2536		2537		2538		2539		2540		2541		2542		2543		2544		2545		2546		2547		2548		2549		2550		2551		2552		2553		2554		2555		2556		2557		2558		2559		2560		2561		2562		2563		2564		2565		2566		2567		2568		2569		2570		2571		2572		2573		2574		2575		2576		2577		2578		2579		2580		2581		2582		2583		2584		2585		2586		2587		2588		2589		2590		2591		2592		2593		2594		2595		2596		2597		2598		2599		2600		2601		2602		2603		2604		2605		2606		2607		2608		2609		2610		2611		2612		2613		2614		2615		2616		2617		2618		2619		2620		2621		2622		2623		2624		2625		2626		2627		2628		2629		2630		2631		2632		2633		2634		2635		2636		2637		2638		2639		2640		2641		2642		2643		2644		2645		2646		2647		2648		2649		2650		2651		2652		2653		2654		2655		2656		2657		2658		2659		2660		2661		2662		2663		2664		2665		2666		2667		2668		2669		2670		2671		2672		2673		2674		2675		2676		2677		2678		2679		2680		2681		2682		2683		2684		2685		2686		2687		2688		2689		2690		2691		2692		2693		2694		2695		2696		2697		2698		2699		2700		2701		2702		2703		2704		2705		2706		2707		2708		2709		2710		2711		2712		2713		2714		2715		2716		2717		2718		2719		2720		2721		2722		2723		2724		2725		2726		2727		2728		2729		2730		2731		2732		2733		2734		2735		2736		2737		2738		27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FEMALE MORTALITY FIGURES FOR NEWARK FOR YEAR 1920 *(continued)*

CAUSES OF DEATH	All Ages	Un- der 1	1	2	3	4	Total Under 5	5 9	10 14	15 19	20 24	25 29	30 34	35 39	40 44	45 49	50 54	55 59	60 64	65 69	70 74	75 79	80 84	85 89	90 Over
Diabetes	40							1	1		1	1		3	0	2	6	5	9	7	6	2	3		
Adipose Disease	0															2									
Anemia, Chlorosis	1			1			1				1			1	1		1		2	3					
Other General Diseases	2												1						1						
II. NERVOUS SYSTEM AND ORGANS OF SPECIAL SENSE Total	215	6	7	1		3	17	5	2	2	1	8	3	10	8	10	12	14	21	37	4	3	0	6	
Encephalitis	1								1						1										
Meningitis	16	4	2			2	9	1		1		2		1	1	1									
Cerebrospinal Meningitis	8	1	1	1		1	4	3		1															
Locomotor Ataxia	4													1	1					1					
Other Diseases of Spinal Cord	11														1			1	1	1				1	
Acute Anterior Poliomyelitis							1		1																
Cerebral Hemorrhage Apoplexy	177												2	8	4	9	9	13	17	3	19	12	30	8	6
Paralysis without Special Cause	4																1								
Other Forms of Mental Alienation	5										1	2									1	1			
Convulsions (under 5 years)	3	1	2				3																		
Neuritis and Neuritis	2																1					1			
Other Diseases of Nervous System	8											3	1				1							1	
Diseases of Eyes and Annexa	1											1													
Diseases of Ears	1							1																	
III DISEASES OF CIRCULATORY SYS																									
IFM Total	30	1	1	1		2	5	1	13	9	8	9	6	12	10	14	24	35	48	57	70	24	17	7	
Acute Endocarditis	38	2		1		1	4		6	3	2	1	1	4	4	3	3	2	4						1
Organic Diseases of the Heart	38	3	1			1	5	1	7	5	5	7	4	7	5	10	19	20	17	31	33	19	21	11	2
Angina Pectoris	6																1	3	0		1				
Diseases of Arteries, Arteriosclerosis, etc.	5															1	1	1	4	7	2	9	1	6	4

DEPARTMENT OF HEALTH

[illegible]

FEMALE MORTALITY FIGURES FOR NEWARK FOR YEAR 1926 *(continued)*

CAUSES OF DEATH	Ages	Under 1	1	2	3	4	Total Under 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and over
VIII DISEASES OF SKIN—Total	4	1					2			1	1														
Eczema	3	1					1			1															
Acute Abscess	1		1				1																		
Other Diseases of Skin	2								1						1										
IX DISEASES OF BONES ORGANS OF LOCOMOTION—Total	4			1	1		2																		
Diseases of Bones	4				1	1	2	1	1																
X MALFORMATION—Total	7	170					170	1																	
Congenital Malformations	14	18					18	1																	
Congenital Debility	5	126					126																		
Other Diseases, Early Infancy	28	26					26																		
XI. OLD AGE—Total	23																								
Senility	23																								
XII EXTERNAL CAUSES—Total	11	7	7	7	4		27	12	2	4	3	4	3	4	4	4	9	1	9	3	6	4		1	1
TOTAL SUICIDES	16									1	2	1					4	1		1		1			
Suicide by Asphyxia	9									1				1	1	1	2		1						
Suicide by Hanging	2																								
Suicide by Drowning	1										1														
Suicide by Firearms	2										1					1									
Suicide by Cutting or Piercing Instruments	1													1											
Suicide by Jumping	1																				1				
TOTAL ACCIDENTS	21	6	2	7	7	4	26	12	2	4	1	2	1	2	2	2	4		9	2	6	3		1	1
Poisoning by Food	2			1			1			1															
Other Acute Poisonings	3																								

FEMALE MORTALITY FIGURES FOR NEWARK FOR YEAR 1920—(Continued)

CAUSES OF DEATH	All Ages	Under 1	1	2	3	4	Total Under 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to and over
Conflagration	9								1	1															
Burns	17		1	5	2	1	9	3		2		1	1					1							
Absorption of Gases	14	4					4				1							3	1	1	2				
Drowning	1								1							2									
Fall	15		1				1																		
Street Car	5													1				2	1	4	1		1	1	
Automobile	28			1	4	3	8	9				1					3	1							
Other Vehicles	7				1		1																		
Motorcycle	7																								
Other External Violence	3	2					2								1						1				
TOTAL HOMICIDES	4	2					1				1		1				1								
Homicides by Firearms													1												
Homicides by Cutting or Piercing Instruments	1										1						1								
Homicides by Other Means	1	1					1																		
XIII. ILL-DEFINED DISEASES—Total	1	8	2	1			5		1								1								
Not Specified or Ill-defined	1	8	2	1	1		5		1								1								

FINANCIAL REPORT FOR THE YEAR 1920

RECEIPTS

	Tax Approp- riation	Animal Permits	Anti-Toxin Sales	Bacterio- logical Examina- tions	Chicken Permits	Chicken Slaughter House Permits	Ice Licenses	Milk Licenses	Milk Penalties	Plumbing Permits	Plumbers' Licenses	Miscel- laneous	Total
City Commissioners	\$279,901.90												\$279,901.90
Sanitary Division		\$ 101.00			\$ 1,814.00	\$ 1,350.00	\$ 800.00					\$ 482.00	4,515.00
Food and Drug Division								\$ 2,497.50	\$ 415.00				4,106.50
Plumbing Division										\$ 2,500.00	\$ 2,705.00	349.00	6,655.00
Laboratories Division			\$ 122.00	\$ 306.00									628.00
Total	\$279,901.90	\$ 101.00	\$ 122.00	\$ 306.00	\$ 1,814.00	\$ 1,350.00	\$ 800.00	\$ 2,497.50	\$ 423.00	\$ 2,500.00	\$ 2,705.00	\$ 329.00	\$284,946.90

DISBURSEMENTS

DIVISIONS	Salaries	Heat, Light, Power, Tele- phones	Furniture and Fixtures	Improvements and Repairs	Printing, Stationery, Postage	Travelling	Janitors' Supplies	Stable Expenses	Drugs and Surgical Supplies	Automob- iles and Motorcycles	Automob- iles and Motorcycle Main- tenance	Miscel- laneous	Total
Administration	\$ 25,579.12	\$ 2,384.21	\$ 302.22	\$ 2,602.49	\$ 2,977.55	\$ 22.12	\$ 202.22			\$ 1,561.35	\$ 818.80	\$ 742.82	\$ 39,661.91
Sanitary	32,819.06				845.37	207.79				243.00	148.21	289.75	54,509.29
Contagious Diseases	2,781.30				1,426.13							* 2,200.00	6,456.00
Disinfecting	22,000.00		206.00		262.88							† 2,607.72	25,567.58
Laboratories	29,679.51		112.40	41.64	621.62			\$ 2,432.08					
Tuberculosis	15,116.56			179.10	229.50	761.00					117.00	2,471.60	27,506.74
Food and Drug	36,225.37				526.61	1,689.97					935.06	358.50	37,443.42
Plumbing	11,754.42				88.55	109.43				417.00	1,372.84	1,482.41	25,918.29
Child Hygiene	22,549.79				669.07	135.42	72.25					281.50	24,305.88
District Doctors	5,051.37										700.61	607.35	21,783.51
Parochial Schools	6,331.50				79.64	202.75						49.57	5,053.57
Dispensary	19,454.44		221.00	219.85	209.44	147.05			\$ 2,542.14			473.25	23,179.87
Total	\$255,800.50	\$ 2,594.21	\$ 412.61	\$ 4,222.06	\$ 8,203.89	\$ 2,724.07	\$ 435.48	\$ 2,432.08	\$ 2,542.14	\$ 2,968.25	\$ 4,071.82	\$11,074.97	\$270,211.93

* Includes \$1,594.45 for reporting preventable diseases.

† Includes \$1,903.75 for disinfectants.



